which is the tracheal pressure displaced by water vapor pressure when
the breathed air becomes saturated with water vapor at 37 °C).

(2) STPD means Standard, Temperature, and Pressure, Dry (which is, 0 °C
at 760 mm. Hg with no water vapor).

[Doc. No. 26344, 58 FR 18978, Apr. 9, 1993]

§ 23.1445 Oxygen distribution system.

(a) Except for flexible lines from oxygen outlets to the dispensing units, or
where shown to be otherwise suitable to the installation, nonmetallic tubing
must not be used for any oxygen line that is normally pressurized during
flight.

(b) Nonmetallic oxygen distribution
lines must not be routed where they
may be subjected to elevated tempera-
tures, electrical arcing, and released
flammable fluids that might result
from any probable failure.

[Doc. No. 26344, 58 FR 18978, Apr. 9, 1993]

§ 23.1447 Equipment standards for ox-
ygen dispensing units.

If oxygen dispensing units are in-
stalled, the following apply:

(a) There must be an individual dis-
pending unit for each occupant for
whom supplemental oxygen is to be
supplied. Each dispensing unit must:

(1) Provide for effective utilization of
the oxygen being delivered to the unit.

(2) Be capable of being readily placed
into position on the face of the user.

(3) Be equipped with a suitable means
to retain the unit in position on the
face.

(4) If radio equipment is installed,
the flightcrew oxygen dispensing units
must be designed to allow the use of
that equipment and to allow commu-
nication with any other required crew
member while at their assigned duty
station.

(b) If certification for operation up to
and including 18,000 feet (MSL) is re-
quested, each oxygen dispensing unit must:

(1) Cover the nose and mouth of the
user; or

(2) Be a nasal cannula, in which case
one oxygen dispensing unit covering
both the nose and mouth of the user
must be available. In addition, each
nasal cannula or its connecting tubing
must have permanently affixed—

(i) A visible warning against smoking
while in use;

(ii) An illustration of the correct
method of donning; and

(iii) A visible warning against use
with nasal obstructions or head colds
with resultant nasal congestion.

(c) If certification for operation
above 18,000 feet (MSL) is requested,
each oxygen dispensing unit must
cover the nose and mouth of the user.

(d) For a pressurized airplane de-
signed to operate at flight altitudes
above 25,000 feet (MSL), the dispensing
units must meet the following:

(1) The dispensing units for pas-
sengers must be connected to an oxy-
gen supply terminal and be imme-
diately available to each occupant
wherever seated.

(2) The dispensing units for crew-
members must be automatically pre-
sented to each crewmember before the
cabin pressure altitude exceeds 15,000
feet, or the units must be of the quick-
donning type, connected to an oxygen
supply terminal that is immediately
available to crewmembers at their sta-
tion.

(e) If certification for operation
above 30,000 feet is requested, the dis-
ensing units for passengers must be
automatically presented to each occu-
pant before the cabin pressure altitude
exceeds 15,000 feet.

(f) If an automatic dispensing unit
(hose and mask, or other unit) system
is installed, the crew must be provided
with a manual means to make the dis-
ensing units immediately available in
the event of failure of the automatic
system.

[Amend. 23–9, 35 FR 6387, Apr. 21, 1970, as
amended by Amend. 23–20, 42 FR 36969, July 16,
1977; Amend. 23–30, 49 FR 7349, Feb. 28, 1984;
Amend. 23–43, 58 FR 18978, Apr. 9, 1993; Amend.
23–49, 61 FR 5170, Feb. 9, 1996]

§ 23.1449 Means for determining use of
oxygen.

There must be a means to allow the
crew to determine whether oxygen is
being delivered to the dispensing equip-
ment.

[Amend. 23–9, 35 FR 6387, Apr. 21, 1970]