

AvtechTyee's lighting fixtures have been standard equipment aboard the C17 aircraft since the program's inception. Recently, the same design has been applied to the USAF C-5 upgrade program. The fixtures are designed to operate over the -40 to +71 degree C temperature range and are able to withstand 9 G's of random vibration and meet all other environmental requirements typical of a military or commercial freighter/cargo application.

Integrated within the fixture are two electronic ballasts which use 115 VAC, 400 Hz power. The ballast also boasts a 20:1 dimming capability. The fixtures use four T10 lamps and supply up to 160 watts of fluorescent lighting power per fixture.



## C17 Lighting Fixtures

Both overhead and sidewall fixtures are used in the aircraft, with critical engineering demands put on the equipment due to the severe service typical of military cargo transport missions.

- Qualified to military standards
- Ballast contains unique low temperature circuit giving the design the ability to operate down to -40 degrees C
- Rugged, suitable for any cargo loading application
- Able to operate in high vibration environments
- Fixture and ballast MTBF in excess of 100,000 flight hours
- Fixtures incorporate Avtech's patented electronic ballast
- Fixtures are made to facilitate easy removal and replacement of lamps by the use of a swing-away lens assembly.

Since 1969 AvtechTyee has been a leader in the design, development, and manufacture of electronic systems for the aerospace industry, with a focus in three product groups: Audio, Avionics and Structures.

AvtechTyee products are flying onboard 42 aircraft types within the air transport, regional commuter, and business jet sectors, serving 450 customers in 49 countries of the world.

Our versatility in supporting aerospace electronics requirements ranges from the custom design and manufacturing of complex power supplies to complete Digital Audio Systems.

AvtechTyee is certified to ISO9001, AS9100 and the FAA's ACSEP. Product Support includes in-house repair services (FAA approved Repair Station #IG6R621N), loaner/exchange programs, and both in-house and offsite airline training.

## AvtechTyee Corporation

6500 Merrill Creek Parkway  
Everett, Washington 98203

[www.AvtechTyee.com](http://www.AvtechTyee.com)

[info@AvtechTyee.com](mailto:info@AvtechTyee.com)

Tel: (425) 290-3100

Fax: (425) 513-6474

## SPECIFICATIONS

Section	Condition	Category
Power Input	MIL-STD-704C	Paragraph 5.2
Electromagnetic Compatibility	MIL-STD-462 MIL-STD-461 Paragraph 5.4.4 Paragraph 5.4.5 Paragraph 5.4.6 Paragraph 5.4.7	Notice 2, Class A1 Notice 3 CE03 0.02 to 50 MHz Conducted Emissions CE04 0.02 to 50 MHz Conducted Emissions RE02 14 kHz to 1 GHz, Radiated Emissions RE02 14 kHz to 1 GHz, Radiated Emissions
Temperature Altitude	MIL-STD-810C	Method 504.1, Category I
Vibration	MIL-STD-810C	Method 514.2, Category b.2
Salt Fog	MIL-STD-801C	Method 509.1, Paragraph 2.0-2.3
Fungus	MIL-STD-454	Table 4-1, Group I
Humidity	MIL-STD-810C	Method 507.1, Procedure i
Shock	MIL-STD-810D	Method 516.3, Procedure I and V
Sand and Dust	MIL-STD-810C	Method 510.1
Acoustical Noise	ANSI S1.13-1971 ANSI S1.4-1983 ANSI S1.11-1966	Similar
Bonding Resistance	MIL-B-5087B	Amendment 2, Class H



A significant benefit of AvtechTye's fluorescent lighting assemblies are the electronic ballasts incorporated into the designs. These state-of-the-art ballasts are half the weight of conventional ballasts and have a "universal" design. Each part number can serve different lamp requirements, plus one ballast can drive up to two lamps, resulting in sizable weight and cost savings.



6500 Merrill Creek Parkway  
Everett, Washington 98203  
www.AvtechTye.com  
info@AvtechTye.com  
Tel: (425) 290-3100  
Fax: (425) 513-6474