

PLATFORM CONTROLS & AIRCRAFT COMPONENTS

Military & Commercial



ESSEXTM
INDUSTRIES

ESSEX INDUSTRIES

Essex Industries began as a family affair in Saint Louis, Missouri, over 75 years ago and has established itself as a prominent player within the aerospace and defense industry, offering platform controls, aircraft components, emergency breathing equipment, and liquid oxygen systems. With a legacy of creative innovation and an unwavering commitment to overcoming challenges, Essex has proudly contributed to every major aerospace program since 1947, becoming a leading aerospace and defense manufacturer.

Essex is able to gain a deep understanding of customer needs and engineer custom solutions to meet challenging requirements from the aerospace industry. Essex's products are known for their reliability and performance. This is accomplished through their rigorous quality control processes and the involvement of the dedicated engineering staff from part inception to delivery. Essex partners with world-leading OEMs and has a proven track record of delivering on the toughest application.

Essex products are on board nearly every US fighter, trainer, bomber, and cargo aircraft currently in operation worldwide. An industry leader in military fighter aircraft human machine interface controls, Essex also has several successful launches of ground combat vehicle and rotor-wing aircraft controls, including collective and cyclic grips, pedestal assemblies, and cockpit control panels. We're honored to work with leading Aerospace and Defense OEMs and serve advanced aircraft programs.

Essex Aircraft Components fulfill OEM requirements within the demanding aircraft subsystems including fuel, hydraulic, pneumatic, and oxygen systems. Our precision machined products include valves, flame arrestors, dampeners, tail rotor pedal assemblies, bulkheads, dash panels, struts, bell cranks, linkages, and hundreds of other mechanical and electromechanical components and assemblies.

Experience is one of Essex's greatest assets. The company has robust manufacturing capabilities that allow us to be agile and flexible and be able to adapt to new requirements. Essex will continue to learn and grow as we move forward. www.essexindustries.com



OVER 230,000 ft² OF MANUFACTURING SPACE

Essex employs over 450 people in Saint Louis, Missouri, Huntington Beach, California, and Milford, Connecticut, serving local, national, and international customers, both military and commercial.



PLATFORMS Programs

Essex Industries designs and manufactures platform controls and aircraft components for fighter jets, bombers, cargo planes, helicopters, trainers, ground vehicles, and weapons systems.

FIXED-WING

- A-10

A330 MRTT

AT-6

ATD-X

A/V-8B

B-1B

B-2

B-21

B-52

BAE-HAWK

IC-130J

C-17

E-2C

Eclipse 500

F-1

F-5

F-15/F-15EX

F-16

F/A-18

F-22

F-35

HURKIS

IA-63

KC-46A

KC-135

KC-767

KT-1

M-311

M-346

MiG-21

SF-260

S-25

Sukhoi Superjet 100

T-7A

T-38

T-45

T-50

ROTARY-WING

Bell 204

Bell 209

Bell 525

CH-53K

HH-60

HH-65

MH-60

MH-65

S-61

S-70

S-92

UH-60

V-22

V-280

GROUND COMBAT

Abrams M1A2

Bradley Fighting Vehicle

CRS³ TUA

Sharpshooter Turret

Viper Gun System

PLATFORM CONTROLS

AS9100 & ISO 9001 Certified
MIL-STD-810 Qualified or Equivalent
NADCAP Certified

FIXED-WING PROGRAMS

Essex Platform Controls are onboard dozens of aircraft and land combat vehicles throughout the world, corporate and general aviation aircraft. In addition to production-level requirements, Essex also supports the aftermarket with spares and repair capabilities.

DOMESTIC APPLICATIONS:

A-10, AT-6, A/V-8B, B-1B, B-2, B-21, B-52, C-130J, C-17, E-2C, F-1, F-5, F-15, F-16, F/A-18, F-22, F-35, KC-46A, KC-135, KC-767, T-7A, T-38, T-45, Eclipse 500

OVERSEAS APPLICATIONS:

A330 MRTT, ATD-X, F-5, BAE Hawk, HURKUS, IA-63, KT-1, M-311, M-346, MiG-21, SF-260, SU-25, Sukhoi Superjet 100, Sharpshooter Turret (Turkey), T-38, T-50



**AT-6
CONTROL
STICK GRIP**

P/N 9022860100-2



**AT-6 THROTTLE
CONTROL GRIP
ASSEMBLY**

P/N 9022860300-1



**F-15 STICK
GRIP AFT SEAT**

P/N 9020010700-15



**F-15 STICK GRIP
FRONT SEAT**

P/N 9020011200-3



**F-22 RAPTOR
STICK GRIP**

P/N 1495HC13122-107



**F-22 RAPTOR
THROTTLE GRIP**

P/N 1495HC13123-105 & 109



**F-35 JOINT
STRIKE FIGHTER
SIDE STICK GRIP**

P/N 9021490300-7



**F-35 JOINT STRIKE
FIGHTER THROTTLE
GRIP**

P/N 9021490400-1



**HURKUS
STICK GRIP**

P/N 9022380600-3



**HURKUS
THROTTLE GRIP**

P/N 9022380500-3



**KC-46 REFUELING
BOOM CONTROL
SYSTEM**

P/N 9022340800-1



**KC-46 TELESCOPING
CONTROL GRIP**

P/N 9022340900-1



U.S. Air Force | C-130J



A330 MRTT
P/N 9022340400-1



**C-17
CONTROL
STICK GRIP**
P/N 9020060100-6



**C-130J
CONTROL WHEEL &
COLUMN ASSEMBLY**
P/N 9970040100-1 & -2
P/N 1493367010-1 & -2



**F-16
FIGHTING
FALCON
SIDESTICK
GRIP**
P/N 004-16C1090-1



**F-18
STICK GRIP**
P/N 9020011000-7



**M-346
WEAPONS
SYSTEM
OFFICER HAND
CONTROLLER**
P/N 9021821000-1



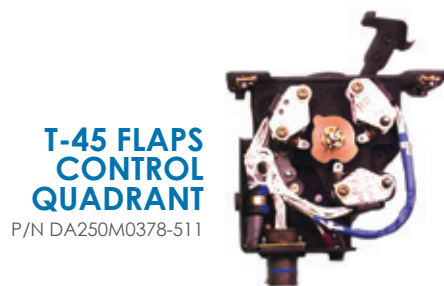
**V L J
SIDESTICK
GRIP**
P/N 9022130100-5



**MHI ATD-X
FLIGHT
CONTROL
STICK GRIP**
P/N 9022740100-1



**SUKHOI
SUPERJET 100
STICK GRIP**
P/N 9022340600-11



**T-45 FLAPS
CONTROL
QUADRANT**
P/N DA250M0378-511

ROTARY-WING PROGRAMS

Essex cyclic and collective grips, as well as the complete pedestal assemblies can be found on both military and commercial helicopters.

APPLICATIONS:

Bell 204, Bell 209, Bell 525, CH-53, HH-65, MH-60, MH-65, S-61, S-70, S-92, UH-66, V-22, V-280



**BELL 525
COLLECTIVE
GRIP**
P/N 9021990400-2

**BELL 525
CYCLIC
GRIP**
P/N 9021990400-1



**S-61
COLLECTIVE
GRIP**
P/N 9024010200-1



**S-61
CYCLIC
GRIP**
P/N 9024010100-1



**ERGONOMIC
COLLECTIVE
GRIP**
P/N 9022710200-1



**HH-65
COLLECTIVE
GRIP**
P/N 9023390100-1 & 2



Bell 525 Relentless

UPGRADE/RETROFIT PROGRAMS



U.S. Air National Guard | A-10C Thunderbolt

Advanced engineering and manufacturing capabilities enable Essex to provide grips for upgrade or retrofit requirements.

A-10 FLIGHT CONTROL STICK GRIP
P/N 9022960100-1



IA-63 STICK GRIP
P/N 9022140500-1



IA-63 THROTTLE GRIP
P/N 9022140600-1



IA-63 PAMPA STICK GRIP
P/N 9022140300



IA-63 PAMPA INBOARD THROTTLE GRIP
P/N 9021720600-1



LAND COMBAT PROGRAMS

Essex provides grips for turret/weapon control applications for domestic and international military ground vehicles and weapon systems.



50 CALIBER VIPER GUN SYSTEM CONTROL GRIPS
P/N 9023100100-1 & 2



GROUND VEHICLE HAND STATION
P/N 318-812270



BRADLEY FIGHTING VEHICLE CONTROL GRIP
P/N 9020060900-3



BRADLEY FIGHTING VEHICLE CONTROL GRIP
P/N 9020060900-1 & P/N 9020060800-2



ABRAMS M1A2 COMMANDER CONTROLLER ASSEMBLY
P/N 12283114
NSN 1290-01-076-6740



ABRAMS M1A2 WEAPONS CONTROLLER ASSEMBLY
P/N 12283113-3
NSN 1290-01-428-2547



ABRAMS M1A2 GUNNER CONTROLLER ASSEMBLY
P/N 12549968-5
NSN 1290-01-466-7722



U.S. Army | M1 Abrams Main Battle Tank



AIRCRAFT COMPONENTS

AS9100 & ISO 9001 Certified
MIL-STD-810 Qualified or Equivalent



COMPONENTS AIRCRAFT

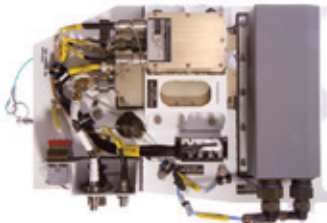
Essex produces a wide variety of mechanical and electro-mechanical components and assemblies for virtually every aircraft system. Product lines includes valves (all types), hydraulic pulsation dampeners, disconnects (GOX, LOX, fuel), pressure regulators, and flame arrestors.



BORESIGHT REFERENCE UNIT

P/N 5750010200-1

An optical alignment device that is mounted on the upper right side of the F-15 and F-18 instrument panel.



ADVANCED TARGETING FORWARD-LOOKING INFRARED SYSTEM (ATFLIR) ELECTRONICS TRAY & COCKPIT PANEL

P/N 001-74R880660-1001

P/N 5600010600-1

When activated through the cockpit panel, the system allows for imagery from the aircraft's infrared sensor to be transmitted to a ground-based unit.



AIRCRAFT OXYGEN REGULATOR

P/N 5545

Controls the pressure and flow of oxygen in aerospace life support systems.



HYDRAULIC PULSATION DAMPENER

P/N 9011440500-3

Designed to reduce fluid pressure pulsations generated by aircraft hydraulic pumps.



MOUNTING BASE BRACKET

P/N 50C-0018-1

The mounting base bracket is designed to mount liquid oxygen converters and OBOGS systems in aircraft. Made of corrosion resistant steel. Conforms to MS90341. Hole placement can be modified to meet specific customer requirements.

GASEOUS OXYGEN QUICK DISCONNECT COUPLING

P/N 256000-SERIES

NSN 4730-00-580-2163

This coupling is designed in accordance with MIL-C-21049 and allows for the rapid disconnect and connection of aircraft LOX converters for servicing purposes.



FLAME ARRESTORS

P/N 6301520300-1

NSN 1560-01-601-1469

Flame arrestors are designed to allow for the venting of fuel vapors while preventing external flames or other ignition sources from entering the fuel lines and supply.

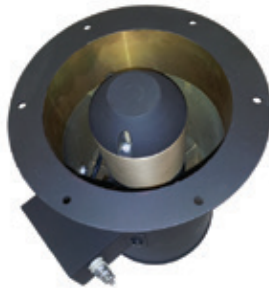


AVIONICS COOLING BLOWER

P/N 06-1001-12

NSN 4140-01-164-8298

The avionics blower is a high capacity, high velocity coaxial fan designed to pull cool air into and through an avionics bay to prevent the electronics from overheating. This unit is currently installed on the OH-58 helicopter.



FUEL EJECTOR PUMP

P/N 03-1001-05-1

This fuel ejector pump has an integral check valve to prevent fuel from draining back into the tank when the system is shut down. Inlet fitting for a 5/8" line size, outlet port is for a 1" line size. 94% efficiency.



COMPONENTS LIQUID OXYGEN VALVES



LIN FILLER VALVE
P/N 20C-0021-4
NSN 4820-01-207-3166

LOX FILLER VALVE
P/N 20C-0021-2
NSN 4820-00-796-9680

Liquid Oxygen and Nitrogen Filler Valves are specifically designed to service liquid oxygen and nitrogen systems for military aircraft.

- Perform in accordance with MIL-PRF-38201
- Automatically open and close when activated by the mating component
- Pin quantity and size variations provided for proper coupling
- CRU-59/E connection



CRYOGENIC RELIEF VALVE
P/N 20C-0050 series
NSN 4820-00-019-9611

Cryogenic Relief Valves are designed for use on Air Force and Navy liquid oxygen converters as well as other cryogenic systems.

- Meets all MIL-PRF-9050 requirements
- Stainless steel ball and a teflon seat arrangement provides zero leakage at re-seat pressures and ample area of flow in excess of 100 L/min
- ANPT threaded inlet and outlet ports, aluminum body construction with stainless corrosion resistant internal parts
- Available in a wide range of pressure settings to accommodate a variety of system requirements



CRYOGENIC LOW PRESSURE CLOSING VALVE
P/N 20C-0008-1
NSN 1660-00-113-9109

LOX Pressure Closing Valves are designed for use on Air Force and Navy liquid oxygen converters as well as other cryogenic systems with operating pressures of less than 130 PSIG. The pressure closing valve allows the cryogenic system to maintain operating pressure while in use.



CRYOGENIC HIGH PRESSURE CLOSING VALVE
P/N 20C-0011-1
NSN 4820-00-081-1992

The LOX Pressure Closing Valve is designed for use on Air Force and Navy liquid oxygen converters as well as other cryogenic systems with operating pressures of 300 PSIG. The pressure closing valve allows the cryogenic system to maintain operating pressure while in use.



LOX DRAIN VALVE
P/N 20C-0001-11
NSN 1660-00-803-2322

LOX Drain Valves are designed for use with the Air Force and Navy liquid oxygen converters. The drain valve allows the LOX system onboard an aircraft to be completely drained.



LOX QUICK DISCONNECT COUPLING
P/N 528000-SERIES
NSN 4730-00-755-7237

The LOX Quick Disconnect is a self-sealing coupling designed in accordance with MIL-C-21049. It allows for the rapid disconnect and connection of aircraft LOX converters for servicing purposes.



LOX CHECK VALVE
P/N 311000-16
NSN 1660-00-677-5530

The LOX Check Valve is designed to operate with gaseous or liquid oxygen over a temperature range of -300° F to +260° F. The valve incorporates an elastomer seal to ensure zero leakage with gaseous oxygen.



LOX FILL, BUILDUP AND VENT VALVE
P/N 0580560100-1
NSN 1660-01-092-5376

The Fill, Buildup and Vent Valve is an automatic-acting type valve that provides a safe, rapid method to control liquid and gaseous oxygen flow during the fill-up and operation of cryogenic converters.

- Meets and/or exceeds functional and environmental requirements of MIL-PRF-25961
- Designed to mate with the standard liquid oxygen filler valve per MIL-PRF-38201
- Check valve in the fill port prevents reverse flow of liquid gases
- Constructed of aluminum with stainless steel poppets and Teflon seals
- CRU-50/A connection

COMPONENTS VALVES

Ranging in size from just 1/4" to over 6" and pressures from a few psi to several thousand pounds, our experience in producing the highest quality valves is unmatched. Through our Alar® products division, we are the leading producer of pneumatic Anti-Gravity Pressure Regulating Valves which are used to protect the aircrew during all g-load conditions.

APPLICATIONS:

Airbus and Boeing Transports and Commercial Airliners, Embraer and Bombardier Regional Jets, Beechcraft, Gulfstream and Cessna Corporate Aircraft, plus military applications throughout the world.



ANTI-GRAVITY VALVE

P/N 14080
NSN 1660-01-347-1685

A durable, pneumatic pressure-regulating valve that automatically reacts to positive G-forces acting on the aircraft and crew members.



HYDRAULIC CHECK VALVE

P/N 0121521300-SERIES

These valves range in size from 1/4" to 2". They come with a variety of standard and custom end fittings.



AIR SELECTOR VALVE

P/N K-4566

The selector valve is a two position on/off valve that selects between two different pressure or vacuum sources to run instruments on an aircraft.

SOLENOID-OPERATED RADAR COOLING VALVE

P/N 04-1001-16
NSN 4810-01-323-0425

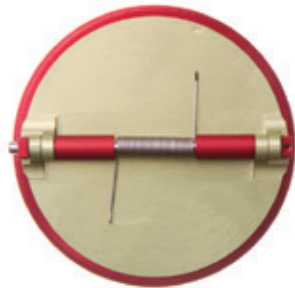
A pilot-operated solenoid valve which, when opened, allows cooler ECS air to flow into the avionics bay to prevent electronics from overheating.



SPLIT FLAPPER FUEL VALVE

P/N 02325103B1-3

This valve is one of three sizes designed and qualified for the F-35 Lightning II fuel system.



ON/OFF OXYGEN VALVE

P/N 596000-18
NSN 4820-01-459-8178

Used by the aircraft commander and cargomaster, it is the primary on/off selector for crew and passenger oxygen supply.



COMPONENTS BUILD TO PRINT

Essex Build-to-Print services can meet customers' requirements for components, assemblies and systems. With drawings and specifications supplied by the customer, Essex efficiently manages the build using support services that include engineers, program managers, procurement and technical staff to ensure quality results.

BUILD-TO-PRINT CONTROL PANELS



BUILD-TO-PRINT COMPONENTS & ASSEMBLIES



MANUFACTURING CAPABILITIES

- CNC Machining Operations
- ASME, DOT and MIL-STD Welding
- Chemical Processing
- Metal Working and Treatment
- Electromechanical Assemblies
- Custom Valve Manufacturing

IN-HOUSE TESTING

- High Pressure Oxygen to 3000 psig
- High Pressure Nitrogen to 6000 psig
- Oxygen Clean Assembly and Test Facilities
- Electrical Testing
- Hydraulic Testing (MIL-H-5606, Skydrol, MIL-H-7808)
- Fuel Testing

CERTIFICATIONS & QUALIFICATIONS

- FAA/PMA Number PQ3409CE
- ISO AS9100 Rev D, Qualified Number C2009-01180-R1
- NADCAP Certified for Chemical Processing #133862 Merit Status



