

Avref_(R) + ***MCRL***

AIRCRAFT PARTS CROSS REFERENCE &
PRICING DATABASE

INSTALLATION AND USERS GUIDE

Version AVMCRL 1.0

For Windows 98/2000/NT/XP_(R)

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Avref Installation (Windows 98/2000/NT/XP)

You will need 5 gigabytes of free drive space to install this product.

- 1) **To upgrade the single-user version of Avref to Avref +MCRL:** Place disk #1 in your cd-rom drive. The installation will auto-run and present you with a menu. Click on the 'Upgrade Existing Avref Program Files to Avref +MCRL' button to begin the installation. The installation will search for the existing version of Avref and suggest that location for installation of the upgrade files. However, if you know that the suggested location is not correct, you can modify the drive and path information as needed. Next, from the auto-run menu, select 'Install or Update Existing Avref Data Files'. The installation will search for an existing version of the Avref data files and suggest that location for installation. However, if you know that the suggested location is not correct, you can modify the drive and path information as needed.
- 2) **To upgrade the network version of Avref to Avref +MCRL:** Perform step (1) above and then click on the 'Network Version Upgrade' button. Note the system ID number on the registration screen & contact us for a password to unlock the network upgrade files. Once you receive & enter this password, install the network upgrade to the same location as you did in step (1) above.
- 3) **To install Avref for the first time:** Place disk #1 in your cd-rom drive. The installation will auto-run and present you with a menu. Click on the 'Install Single-User Version Program Files' button to begin the installation. The program will ask you for drive and path information. We suggest that you take the default (c:\avrefwin), however you may select any drive and path you desire. A program group labeled 'Avref' will be added to the Program Manager and a shortcut will be placed on your Windows desktop. Next, from the auto-run menu, select 'Install or Update Existing Avref Data Files'. Run this installation to the same location as you did in step one above. As the installation proceeds, you will be prompted to install disk #2. Place disk #2 in the drive and click on 'ok'. When the installation has finished, exit the auto-run menu and remove the disk. (If you purchased the network version, please refer to the page labeled "NETWORK NOTES" for additional information.)
- 4) **Start the Avref program by using the Avref shortcut on your Windows desktop.** You will be presented with a registration screen that will allow you to run the Avref program for 5 days prior to obtaining a password, or enter a password to permanently activate the program. To permanently activate the program, contact us with the System ID number shown in the dialog box so we can issue a password. **The password will work on this computer only!** Once you have activated the program by entering your password, you will no longer see the registration screen. (Please note that unless you have purchased the network version, you can install the Avref program **on one computer only**. If you need multiple computer access, please call for information on the network version.)

Setting Program System Preferences:

Once in the program, you have the option of setting certain program operating preferences. These settings are *defaulted to standard US settings* of currency, date format, etc. To see or change these options, select 'File/System Preferences' from the menu bar at the top of the screen. You will see a dialog box in which you can make changes to the currency type, exchange rate, date format, and default report paper size. You may also select 'bell on' or 'bell off'. Turning the bell 'on' will produce a tone through the speaker at various times such as when trying to enter a part number without first opening the search window. The 'Alert If Part Data Is Aged' section controls the function that highlights the 'File Updated' field and controls the 'check date' message that is displayed below the price field on the main data screen when a given part number's 'Record Updated' date exceeds a preset number of months (shown in the 'Age Breakpoint' window). This function is included to bring attention to any record having a date that exceeds the number of months shown in the 'Age Breakpoint' window. You also have the ability to suppress the MCRL records contained in the database. Selecting 'Display Avref Records Only' sets the system to display only AVREF (manufacturer) source records. Any changes you make in the 'System Preferences' window will be saved and used throughout the program.

Using The Program

- 1) Use the *AVREF* shortcut to start the program. Select the 'forward' button at the lower right corner of the screen to advance to the main data screen.

You will now see the following fields on the data screen:

- a) **Part Number**
- b) **NSN** (national stock number)
- c) **Description**
- d) **Mfg/Supplier** (Name of the manufacturer or vendor associated with this part number.)
- e) **Record Updated** (The effective date of this record)
- f) **Record Source** (Origin of the data for this record. Avref (manufacturer supplied) or MCRL (gov't supplied))
- g) **Avref Mfg Code** (A unique manufacturer catalog identifier that identifies the source of the record displayed)
- h) **CAGE Code** (The code assigned to this mfg/vendor by the U.S. gov't)
- i) **CAGE Status** (Active, debarred, obsolete, etc. See file/help for code translation)
- j) **Model** (Possible aircraft model usage when available) *PLEASE NOTE:* Model usage shown for Cessna part numbers actually reflects which service facility agreement type has the ability to purchase this particular part and does not necessarily represent true model usage. See File/Help for code translation.
- k) **Comment** (Additional information as presented by the manufacturer.)
- l) **Condition** (Part condition such as new, overhauled, etc when available.)
- m) **Unit of Measure**
- n) **Pkg Size** (Minimum order quantity)
- o) **Mfg Price** (The manufacturers list price)
- p) **Disc** (Manufacturers discount code)
- q) **SSCD** (The Cessna or Raytheon superseding code. See File/Help for code translation)
- r) **Dep** (The deposit or core charge, if applicable)
- s) **ALT-N For Notes** (This box will be x'd and highlighted if there are notes stored for this part number. These notes are user editable. To access or enter new notes, select ALT-N.)
- t) **ALT-A For Details** (This box will be x'd and highlighted if there additional details stored for this part number. These additional details are not user editable.)
- u) **Part Number** table (This is a list of all part numbers in the database.)
- v) **Supersedure/Alternate** table (A list of supersedure/alternate numbers available for the selected number.)
- w) **Sources** table (Sources (usually manufacturer) you can contact for information)

Selecting 'File/Help', you will give you access to information on condition codes, unit of measure codes, CAGE code status, FSG listings, and Cessna supersedures.

2) Select '**Find**' from the bottom menu bar to bring up the search window. Specify which search category you desire (part number, nsn, mfg, or CAGE). Enter the part number, national stock number, mfg/vendor name, or CAGE code you wish find and click '**Search**'. This window will stay active until you select the '**Close**' button on the search window (or use the 'esc' key). This will allow you to check numerous numbers without having to call up the search window each time. When searching stock numbers, mfg/vendor, or CAGE you can select 'next' to proceed to the next record that meets your search criteria. To scroll the main part table, select '**Close**' to clear the search window (or use the 'esc' key). **Note that you can choose to search part numbers with or without dashes (-) included (default is with dashes).**

3) If the part number you entered is contained in the database, it will appear in the part number field at the top left of the screen. If it is not in the database, the next numeric part number will appear. *If you see several occurrences of your selected part number in the 'Main Part Table' on the left of the screen, close the search window by clicking on the 'Close' button in the search window (or hit the 'esc' key). This will allow you to scroll the 'Main Part Number' list with your up-down arrow keys to see additional vendor information and additional alternates.*

*Pay close attention to the '**Record Source**' field in the top right corner of the data screen to determine whether the information displayed is manufacturer supplied or gov't supplied!!*

4) You may now see one or more supersedures or alternate numbers in the **Supersedure/Alternates** table. To access information on these supersedures or alternates, **click on the desired choice** in this table to bring up the information on this selection.

5) The supersedure or alternate you selected will now be displayed along with the related information on that part. To select a different supersedure or alternate or to return to the original part number, **click on the desired choice** in the Supersedure/Alternates table.

6) To see or add notes to the part number selected, click on the '**ALT-N for Notes**' box. Type in your notes and select the 'Close' to save them. The notes box on the main screen will now be x'd and highlighted to indicate you have stored notes for this part number. (Note: This function is active for AVREF source records only...you cannot save notes for MCRL source records).

7) To check for additional details on a given part number or vendor, click on the '**ALT-A for Details**' box (this box will be x'd and highlighted if there are any additional details available). If there are any additional details such as address, fax numbers, etc, they will be displayed in this window. These notes *cannot be edited by the user*. Use the ALT+N feature described above to create & store your own notes.

8) To print the information on the active screen, select '**Report**' from the bottom menu bar or click on the printer icon located on the search window. This will send all the information on the screen to your printer including stored notes and the computed cost if you have entered discount percentages in the discount table (see next page). To change printer selection, select 'Printer Set-Up' from the 'File' menu pop up at the top of the screen.

9) To use the **Batch Search** mode, select either '**P/N Batch Search**' or '**NSN Batch Search**' from the bottom menu bar. This brings up a search screen that allows you to enter an unlimited number of part numbers or national stock numbers to be searched. Simply click on the 'add' button to create or add to your search list. Enter your part number or nsn and any other options such as vendor code or exact match (if desired) and press '**Close**'. You may edit or delete numbers from your list at any time. If you enter a part number and leave the vendor code field empty, the search will look for ALL part numbers that match the criteria you entered in the part number field including the 'fuzzy' part numbers. If you enter a part number AND a vendor code, only those records that meet both criteria will be presented. Specifying an 'Exact' match will further limit the search to the exact part number you entered. A list of vendor codes can be found at the back of this guide. After creating your search list, click on the 'search' button. A window showing the results will now be presented. You now have the choice of reviewing the results on the screen, printing the results to your printer, or saving the results to a delimited ASCII file.

10) To exit the Avref program, select '**Exit**' from the bottom menu bar, or click on the '**X**' at the top right corner of the Avref screen.

DISCOUNT FUNCTION

This feature will allow you to enter a discount percentage as it pertains to a given discount code located in the "Disc:" field of the data screen. Once these discount percentages are inserted, the program will **automatically compute your cost** based on the list price and the discount code shown on the main data screen. Please follow the instructions below to set up and access this discount function.

INITIAL SET-UP

- 1) Start the Avref program and proceed to the data screen.
- 2) Select 'Edit Table' from the Discount menu selection at the top of the screen or press CTRL+E to access the initial discount set-up table.
- 3) Enter your discount percentages as they pertain to each discount code and vendor listed.
- 4) Press "Esc" when you are done editing this table.
- 5) Please note that a "--" in the discount table or in the "Disc" field indicates a "no code" situation.

USING THE DISCOUNT FUNCTION

Once you have performed the initial set up above, the program will automatically perform cost computations for you. You can access the information in this **COST** screen by selecting 'Cost' from the menu item at the bottom of the page. You will now see the vendor name, discount code, discount percentage, list price, and cost price. Select 'Cancel' or press "Esc" to exit this screen.

- 1) If you select 'Cost' on a part number that shows "NA" in the "Disc" field, nothing will happen. This is normal as there is no available discount info associated with these parts.
- 2) If you select 'Cost' on a part number that has other than "NA" showing in the discount code field, the cost computation will take place as long as you have assigned a percentage to the given code for that vendor.
- 3) If you see the message "No discount data available", it indicates that information is missing from the discount set-up table. To add the information, select 'Add' from the Discount menu item at the top of the page. You may now enter the discount percentage that is associated with the discount code showing. This information will be stored in the table and can be edited at any time if necessary.

TROUBLESHOOTING, ERROR MESSAGES & NETWORK NOTES

1) ***File Access denied. (Network Version)***

If you purchased the network version of Avref, make sure you have run 'setup.exe' from the CD-ROM disk followed by 'networkupgrade.exe'. If you see this message when exiting the program, copy the files labeled 'foxuser.dbf' and 'foxuser.fpt' from the \avrefwin folder on the server to the \windows folder on the workstation.

2) ***File Access denied. (Single User Version)***

Check your taskbar to make sure that the Avref program is not already running on your computer. Also, if you are running the single user version of Avref on a network, **make sure** that the program is not already running on another workstation.

3) ***Invalid path or filename or Field name is a duplicate or invalid.***

Usually indicates that the Avref program is having trouble locating the data files. Check the Avref shortcut to make sure that all three parameters in the 'target' line are correct.

4) ***Must specify additional parameters.***

Check the shortcut 'target' line for the proper syntax. Make sure that each of the three parameters is enclosed in quotations (") if the folder name contains a space. For example, if the Avref program was installed to the 'program files\avrefwin' folder, the target line should read:

```
"c:\program files\avrefwin\av.exe" "c:\program files\avrefwin" "c:\program files\avrefwin"
```

5) ***The Avref program cannot locate the data files.***

Right-click on the Avref shortcut (icon). Select 'Properties' then 'Shortcut'. The very end of the 'target' line should reflect a path to the data files on the hard drive (i.e. c:\avrefwin or f:\avrefwin, etc). Now open 'My Computer' & double-click on the drive letter that was shown at the end of the 'target' line. Double-click on the folder specified at the end of the 'target' line & verify that data files labeled 'parts.dbf, parts.fpt, parts.cdx, resource.dbf, and resource.cdx exist within the folder. If these files are not in the folder, the data files have not been installed (or have been installed to an incorrect location).

6) ***The Avref program opens, but the data screen is empty.***

One of two things has happened. Either the data files were not installed or the shortcut is not pointing to the correct location. To determine the problem, right-click on the Avref shortcut. Select 'Properties' then 'Shortcut'. The very end of the 'target' line should reflect a path to the data files on the hard drive (i.e. c:\avrefwin or f:\avrefwin, etc). Now open 'My Computer' & double-click on the drive letter that was shown at the end of the 'target' line (i.e. c or f, etc). Open the folder specified at the end of the 'target' line & verify that a file labeled 'avlocate.dbf' exists within this folder. If this file is not in the folder, the data files have not been installed (or have been installed to an incorrect location). Re-install the data files by clicking on the 'Update Existing Avref Data Files' button on the Avref auto-run menu (or run the file 'data.exe' from the disk). Make sure that the specified installation folder matches what you found at the end of the shortcut 'target' line.

7) ***The following file is in use & cannot be updated.***

If you see a message stating 'The following file is in use & cannot be updated' the Avref program is open somewhere (most likely on a workstation in the network). Close Avref on all workstations & click on 'Retry' to continue the installation. If you click on 'Cancel' when seeing this message, temporary files will be installed on the hard drive & the original files will be replaced with the new files when the system is rebooted.

8) ***The date on the first part number shown in Avref does not reflect the same date as on the CD-ROM disk.***

The date on the first part number that appears on the main Avref data screen should reflect the same date as shown on the CD-ROM disk. If the data file update appears to have been successful, but you do not see a current date (the same date as on the CD-ROM disk) on the first part number, follow the instructions in (6) above.

10) ***When attempting to run the installation, you receive an error message 'You must have at least 2MB free space on your temp drive'.***

Right-click on 'My Computer' and select 'Properties'. Now click on the 'Advanced' tab and select 'Environment Variables'. Double-click on the TEMP user variable and change the *variable value* to another directory such as 'c:\temp' or c:\winnt\temp'. Click on ok and close the window. Run the installation from the auto-run menu.

11) When attempting to run the installation, you receive an error message 'A decompression error has been detected'.

This can occur if the cd-rom drive is having a problem reading the disk. Restart the computer and try the installation again. If restarting the computer does not correct the problem, try installing the program from another cd-rom drive. If you have no other cd-rom drive available, contact RDS for assistance.

Network Notes (revised 07/08/03)

- 1) All workstations must have read/write/create permissions on the server where the Avref program files are installed.
- 2) Place the Avref CD-ROM disk in your drive. The installation will 'auto-run' and present you with a menu. Click on the 'Install Complete Avref Single-User Version' button to begin the installation. Install the single-user version on the network server. When this installation has completed select the 'Network Version Upgrade' button to install the network files. These network files **MUST** be placed in the same location on the server as the single-user version. Note: A registration screen will appear when running the 'Network Version Upgrade'. Make a note the system ID number on the registration screen & contact RDS for a password. Enter the password & continue the installation. (If your system does not 'auto-run', simply access the files on the disk and run the file labeled 'setup.exe' followed by 'networkupgrade.exe'.) If you have not already done so, you must now install the data files by selecting 'Install or Update Existing Avref Data Files' from the auto-run menu (see the 'Avref Installation' page for assistance).
- 3) To create a shortcut on the workstations select the button labeled 'Create an Avref Shortcut For Networking' button. Run this at each of the workstations. When asked for the drive & path information, change the default drive & path to reflect where the Avref files were installed on the server. You can either manually enter the drive & path information or click on the 'Change' button next to the folder line & 'browse' over to the folder on the server where the Avref files are located. For example, if the server drive is mapped as the F: drive from this workstation, you will change the drive & path info to F:\avrefwin (provided that you did not change the default directory from \avrefwin when you did the original Avref installation). If you are running Avref in a thin client environment, simply copy the Avref shortcut that was created on the server during the original installation to a 'common' point on the server that all of the clients can access.
- 4) If, after creating your shortcuts, you receive an error message of '**The Avref Program Cannot Locate The Data Files, Invalid path or filename, or Field name is a duplicate or invalid**', you need to check the last parameter of the shortcut properties target line. The last parameter (there are three parameters in the target line separated by a space) must point to the location where the data files are located. For example, if your server is designated as your F: drive and you installed Avref to F:\avrefwin, the shortcut 'target' line should read as: F:\avrefwin\av.exe F:\avrefwin F:\avrefwin.
- 5) If you see a message stating 'The following file is in use & cannot be updated', the Avref program is open somewhere (most likely on a workstation in the network). Close Avref on all workstations & click on 'Retry' to continue the installation. If you click on 'Cancel' when seeing this message, temporary files will be installed on the hard drive & the original files will be replaced with the new files when the system is rebooted.
- 6) If the Avref program opens, but the data screen is empty, see (6) above.

If you have any questions or if you need additional information, please contact us at:
Phone (407) 366-4034, Fax (407) 366-3195, or email: rpeters@avref.com

Avref Vendor Code Listing (06/30/04)

AB= Aircraft Braking Systems	JT3= Pratt & Whitney JT3
ABI= Airbus Industrie	KA= Kelly Aerospace
AGU= Agusta Helicopter	KOR= Korry Electronics
AIR= Airborne	LJ= LearJet
ALI= Allison Engine	LPA= LP Aero Plastics
AMI= Goodrich Seating	LRM= Lear Romec
AMT=Ametek Aerospace	LY= Lycoming Piston Engine
ARG= Argo-Tech	LYT= Lycoming Turbine Engine
AS2= Allied Signal Executive Airline Repairs	MAC= Mooney Aircraft
AS3= Allied Signal Executive Airline Spares	MCP= McCauley Propeller
AS5= Allied Signal Regional Airline Spares	MAR= Marathon Battery
AS6= Allied Signal Regional Airline Repairs	MDD= McDonnell Douglas Aircraft
AS7= Allied Signal Commercial Airline (Non-Airline Pricing)	MDH= MD Helicopter
AS8= Allied Signal Commercial Airline (Airline Pricing)	MEG=Messier-Goodrich
ATR= Aviones de Transport Regional	MES= Messier-Dowty
BAC= Boeing Aircraft	MRA= Middle River Aircraft Systems
BAE Systems (Avro RJ/Bae146)	ON= Ontic
BCL= Challenger (Bombardier)	OT2= JT Evans Aircraft
BDK= Bendix/King Avionics	OT3= RNL
BDX= Bendix Wheel & Brake	OT5= Ra-Nav
BF1= BF Goodrich Deice (Ga & Regional)	OT6= Keddeg Co.
BF2= BF Goodrich Deice (Commercial)	PI= Piper Aircraft
BFA= Goodrich Avionics	PS= Pacific Scientific
BFG= BF Goodrich Wheel & Brake	PW1= Pratt & Whitney PW100
BH= Bell Helicopter	PW2= Pratt & Whitney PW206
CA= Collins Avionics	PW3= Pratt & Whitney PW305
CC= Circle Seal	PW6= Pratt & Whitney PT6A/JT15D
CFM= CFM International	PW9= Pratt & Whitney PW901A
CF6= General Electric CF6/GE90	P53= Pratt & Whitney PW530A
CH= Crane/Hydro-Aire	P54= Pratt & Whitney PW545A
CIT= Cessna Citation	PWC= Pratt & Whitney Commercial Engine Spares
CJA= CJ Aviation	RAA= Raytheon Airliner Group
CLV= Cleveland Wheel & Brake	RAC= Raytheon Commercial Aircraft
CO= Continental	RAM= RAM Aircraft
CS= Cessna Aircraft	RAP= Rapco
DHC= deHavilland (Bombardier)	RH= Robinson Helicopter
DUN= Dunlop	RR= Rolls-Royce (RB211-535)
EMB= Embraer	RR2= Rolls-Royce (Spey/Tay)
ENS= Enstrom Helicopter	SAA= Smiths Aerospace (Electronics)
EUR= Eurocopter	SAE= Smiths Aerospace (Actuation)
EXT= Extex, Ltd	SCT= Scott Aviation
FJ= Falcon Jet	SH= Schweizer Aircraft
GA= Gulfstream Aerospace	SIK= Sikorsky
GEI= Gables Engineering	SMR= SMR Technologies
GE1= General Electric (T700/CT7)	SOC= Socata
GE2= General Electric (CJ610/CF700)	TAC= Tactair Fluid Controls
GE3= General Electric (CF34)	TRU= True Lock
GR= Goodrich Aerostructures (Rohr)	TCA= Twin Commander Aircraft
GR1= Grimes Aerospace	TR1=TRW Aeronautical (Lucas)
GRH= Goodrich Hella Aerospace	TR2= TRW Aeronautical (Lucas) Airbus Spares
HON= Honeywell (Business & Commuter Aviation)	TR3= TRW Aeronautical (Lucas) Cargo Systems
HRT= HR Textron Helicopter Products	TUR= Turbomeca Engine

HS= Hamilton Sundstrand Commercial & Regional Airlines	UAS= Universal Avionics
HW1= Honeywell Service Parts (List price)	VAL= Valtec Aircraft Supply
HW2= Honeywell Service Parts (Airline price)	VIC= Vickers
HZP= Hartzell Propeller	WG= Woodward Governor
IAE= Intl Aero Engines (V2500)	WKR= Whittaker Controls (commercial)
INT= Intertechnique S.A.	WW= Wencor West
	XRF= Boeing Spec Cross-reference

FSG 15:	Aircraft & Airframe Structural Components
FSC 1510	Fixed Wing
FSC 1520	Rotary Wing
FSC 1560	Airframe Structural Components
FSG 16:	Aircraft Components & Accessories
FSC 1610	A/C Props
FSC 1615	Heli Rotor & Drive Mechanisms
FSC 1620	A/C Landing Gear Components
FSC 1630	A/C Wheel & Brake
FSC 1650	A/C Hydraulic & De-ice
FSC 1660	A/C Air Conditioning & Pressurization
FSC 1670	Parachutes, Aerial Pick-Up, Cargo Ties
FSC 1680	Misc A/C Accessories & Components
FSG 17:	A/C Launching, Landing, Grd Handling Equip
FSC 1710	Aircraft Landing Equipment
FSC 1720	Aircraft Launching Equipment
FSC 1730	Aircraft Ground Handling Equipment
FSC 1740	Airfield Specialized Trucks & Trailers
FSG 26:	Tires & Tubes
FSC 2620	Tires & Tubes-Aircraft
FSG 28:	Engines, Turbines & Components
FSC 2805	Gasoline Reciprocating Engines, Except Aircraft
FSC 2810	Gas Reciprocating, Aircraft Prime Mover
FSC 2815	Diesel Engines & Components
FSC 2820	Steam Engines, Reciprocating & Components
FSC 2825	Steam Turbines & Components
FSC 2830	Water Turbines & Water Wheels & Components
FSC 2835	Gas Turbines & Jet Engines, Non-Aircraft
FSC 2840	Gas Turbine & Jet Engine, Aircraft
FSC 2845	Rocket Engines & Components
FSC 2850	Gasoline Rotary Engines & Components
FSC 2895	Miscellaneous Engines & Components
FSG 29:	Engine Accessories
FSC 2910	Engine Fuel Systems, Non-Aircraft
FSC 2915	Engine Fuel Systems, Aircraft
FSC 2920	Engine Electrical System Comp, Non-Aircraft
FSC 2925	Engine Electrical, Aircraft
FSC 2930	Engine Cooling System Comp, Non-Aircraft
FSC 2935	Engine Cooling, Aircraft
FSC 2940	Engine Air & Oil Filters, Non-Aircraft
FSC 2945	Engine Air & Oil Filters & Cleaners
FSC 2950	Turbochargers & Components
FSC 2990	Misc Engine Accessories, Non-Aircraft
FSC 2995	Misc Engine Accessories, Aircraft
FSG 30:	Mechanical Power Transmission
FSC 3010	Torque Converters
FSC 3020	Gears & Pulleys
FSC 3030	Belts & Accessories
FSC 3040	Misc Power Transmission
FSG 31:	Bearings
FSC 3110	Anti-friction, Unmounted
FSC 3120	Plain, Unmounted
FSC 3130	Mounted
FSG 40:	Rope, Cable & Chain
FSC 4010	Chain & Wire Rope
FSC 4020	Fibre Rope & Twine
FSC 4030	Fittings
FSG 41:	Air Conditioning
FSC 4110	Refrigeration Equipment
FSC 4120	A/C Equipment
FSC 4130	Refrigeration & A/C Components
FSC 4140	Fans & Blowers
FSC 4150	Vortex Tubes

FSG 43:
FSC 4310
FSC 4320
FSC 4330

FSG 47:
FSC 4710
FSC 4720
FSC 4730

FSG 48:
FSC 4810
FSC 4820

FSG 53:
FSC 5305
FSC 5306
FSC 5307
FSC 5310
FSC 5315
FSC 5320
FSC 5325
FSC 5330
FSC 5335
FSC 5340
FSC 5341
FSC 5345
FSC 5350
FSC 5355
FSC 5360
FSC 5365

FSG 58:
FSC 5805
FSC 5810
FSC 5811
FSC 5815
FSC 5820
FSC 5821
FSC 5825
FSC 5826
FSC 5830
FSC 5831
FSC 5835
FSC 5836
FSC 5840
FSC 5841
FSC 5845
FSC 5850
FSC 5855
FSC 5860
FSC 5865
FSC 5895

FSG 59:
FSC 5905
FSC 5910
FSC 5915
FSC 5920
FSC 5925
FSC 5930
FSC 5935
FSC 5940
FSC 5945
FSC 5950
FSC 5955
FSC 5960
FSC 5961
FSC 5962
FSC 5963
FSC 5965
FSC 5970

Pumps & Compressors
Compressors & Vacuum Pumps
Power & Hand Pumps
Centrifugal Pumps

Pipe & Tubing
Pipe & Tube- Rigid
Hose & Flex Tubing
Hose, Pipe & Tube Fittings

Valves
Valves- Powered
Valves- Non-Powered

Hardware
Screws
Bolts
Studs
Nuts, washers
Keys, pins
Rivets
Fasteners
Packings & gaskets
Metal Screening
Hardware
Brackets
Disk & Stones, Abrasive
Abrasive Materials
Knobs & Pointers
Springs
Bushings, Rings, Shims, Spacers

Communication Equipment
Telephone & Telegraph Equip.
Communications Security Equip & Components
Other Cryptologic Equip & Components
Teletype & Facsimile Equip.
Radio & Television Comm Equip., Except Airborne
Radio & Television Comm Equipment, Airborne
Radio Navigation Equip, Except Airborne
Radio Navigation Equipment, Airborne
Intercom & PA Systems, Except Airborne
Intercom & PA Systems, Airborne
Sound Recording & Reproducing Equip.
Video Recording & Reproducing Equip.
Radar, Except Airborne
Radar, Airborne
Underwater Sound Equip.
Visible & Invisible Light Comm Equipment
Night Vision Equip, Emitted & Reflected Radiation
Stimulated Coherent Radiation Devices, Comp & Acces.
Elect. Countermeasures & Counter-Countermeasures
Misc Comm Equipment

Electrical
Resistors
Capacitors
Filters
Fuses & Protectors
Circuit Breakers
Switches
Connectors
Lugs & Terminals
Relays & Solenoids
Coils
Oscillators
Electron Tubes
SemiConductors
Microcircuits
Electronic Modules
Headsets & Speakers
Insulators

FSC 5975
FSC 5977
FSC 5980
FSC 5985
FSC 5990
FSC 5995
FSC 5996
FSC 5998
FSC 5999

FSG 61:

FSC 6105
FSC 6110
FSC 6115
FSC 6116
FSC 6117
FSC 6120
FSC 6125
FSC 6130
FSC 6135
FSC 6140
FSC 6145
FSC 6150
FSC 6160

FSG 62:

FSC 6210
FSC 6220
FSC 6230
FSC 6240
FSC 6250
FSC 6260

FSG 63:

FSC 6340
FSC 6350

FSG 66:

FSC 6605
FSC 6610
FSC 6615
FSC 6620
FSC 6625
FSC 6630
FSC 6635
FSC 6636
FSC 6640
FSC 6645
FSC 6650
FSC 6655
FSC 6660
FSC 6670
FSC 6675
FSC 6680
FSC 6685
FSC 6695

FSG 80:

FSC 8010
FSC 8020
FSC 8030
FSC 8040

FSG 91:

FSC 9110
FSC 9130
FSC 9135
FSC 9140
FSC 9150
FSC 9160

Electrical Hardware.
Electrical Contact Brushes
Optoelectronic Devices
Antennas & Waveguides
Synchros
Cable, wire
Amplifiers
Electrical & Electronic Boards & Cards
Misc Electrical

Electrical Wire & Power Distribution

Motors
Electrical Control Equipment
Generators
Fuel Cell Power Units, Components, & Accessories
Solar Electric Power Systems
Transformers
Converters- Rotating
Converters- Non-Rotating
Batteries- Non-Rechargeable
Batteries- Rechargeable
Wire & cable
Misc Power & Dist. Equipment
Misc Battery Retainers & Liners

Lighting Fixtures

Indoor & Outdoor Lighting Fixtures
Electrical Lights & Fixtures
Electrical Portable & Hand Lighting Equipment
Electric Lamps
Ballasts & Lamp Holders
Non-Electrical Light Fixtures

Alarm, Signal & Detection Systems

Aircraft Alarm & Signal Systems
Misc. Alarm, Signal, & Security Systems

Instruments

Navigation Instruments
Flight Instruments
Autopilot
Engine Instruments
Electrical & Electronic Measuring Instruments
Chemical Analysis Instruments
Physical Properties Testing Equip.
Environmental Chambers & Related Equip.
Laboratory Equipment & Supplies
Time Measuring Instruments
Optical Instruments, Equip, Components, & Accessories
Geophysical Instruments
Meteorological Instruments & Apparatus
Scales & Balances
Hazard-Detecting Instruments & Apparatus
Liquid & Gas Flow Instruments
Pressure & Temperature Instruments
Misc Instruments

Brushes, Paints, Sealers, Adhesives

Paints, Dopes, Varnishes, Related Products
Paint & Artists' Brushes
Preservative & Sealing Compounds
Adhesives

Fuels, Lubricants, Oils

Solid Fuels
Liquid Propellants & Fuels, Petroleum Base
Liquid Propellants & Fuels & Oxidizers, Chemical Base
Fuel Oils
Oils & Greases
Misc Waxes & Oils