

QC
Avro
CF105
70-STD5-1
TO
71-STD5-9

31

Avro Reports - Components
& Materials

70/Std/1. Gen/Std/6.

71/Std/2. Gen/Std/7.

Std No 3. Std No 4.

Gen/Std/5. Std No 7.

UNCLASSIFIED

NRC - CISTI
J. H. PARKIN
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JUN 8 1995

ANNEXE
J. H. PARKIN
CNRC - ICIST

Report Number
70/STDS/1 ISSUE 2
Supersedes Issue 1

AVRO AIRCRAFT LIMITED
ENGINEERING DIVISION

TITLE:

ABC AIR STANDARDS AND NATO STANAGS
COMPLIANCE WITH
ARROW 1 AND 2

UNCLASSIFIED

COMPILED BY: S. R. A.

APPROVED BY: SR Clason

Issue Date - November 17, 1958
Contents - 6 Sheets

AVRO AIRCRAFT LIMITED
AIRCRAFT ENGINEERING DIVISION

70/STDS/1 Issue 2

Sheet 1

TITLE

ABC AIR STANDARDS AND NATO STANAGS
COMPLIANCE WITH
ARROW 1 AND ARROW 2

The following report shows the compliance status of the Arrow 1 and Arrow 2

Aircraft with the ABC Air Standards and NATO STANAGS listed herein.

The status is indicated as complied with, not complied with, partially complied with, or not applicable.

Explanatory status notes are included for all ABC Standards that are not fully complied with.

ABC STANDARDS AND NATO STANAGS

COMPLIANCE WITH

ARROW 1 & 2

AIR STD	SUBJECT	COMPLIANCE	
		ARROW 1	ARROW 2
11/1	Aircraft Markings	Yes	Yes
11/3	Pressure Refuelling	Yes	Yes
11/4	Testing of Aircraft Pressure Cabins	Yes	Yes
11/5	The Aperture of the Terminal Ring or Link of Aircraft Lifting Slings	Yes	Yes
12/2	Aircraft Lighting	Yes	Yes
12/3	Hand Operated Circuit Breakers	Yes	Yes
12/7	Connectors for 115/200 Volts 400 Cycle 3 Phase AC Power (Draft)	Yes	Yes
12/9	Circuit Identification (Draft)	Yes	Yes
13/1	Oil Pressure Gauges	Note 3 NA	Note 3 NA
13/2	Units of Measurement	Note 1 PAR	Yes
13/4	Accelerometer (Draft)	Yes	Yes ← R
13/5	Turn and Slip Indicators (Draft)	Yes	Yes ← R
13/6	Numerals and Letters (Draft)	Yes	Yes
14/4	Working Pressures of Liquid Oxygen Convertors for Aircraft	Yes	Yes
14/5	Method of Expressing Units of Measurement and Marking	Yes	Yes
15/1	Definition of Terminology to Indicate the Degrees of Standardization stated in ABC Air Stds on the various Petroleum and Allied Products		
15/4	Aircraft Turbine Fuels (Jet Fuels) Low Vapour Pressure	NA	NA Note 3
15/8	Aviation Lubricants Oils (Other than Engine Lubricating Oils)		
15/9	Aviation Lubricating Greases		
15/10	Aviation Hydraulic Fluids		
15/11	Aviation Specialty Products		
15/12	Aircraft Turbine Fuels (Jet Fuels) High Flash Point Type	Note 3 NA	Note 3 NA
16/1	Layout of Basic Flight Instruments in Fixed Wing Aircraft	Yes	Note 1 PAR ← R
16/2	Operation of all Controls and Switches at Aircrew Stations	Yes	Yes
16/3A	Engine Controls and Switches in Fixed Wing Aircraft	Yes	Yes
16/4A	Grouping of Electrical Switches	Yes	Yes
16/5	Location of all Airframe Controls other than Primary Flying Controls	Yes	Yes

ABC STANDARDS AND NATO STANAGS

COMPLIANCE WITH

ARROW 1 & 2

AIR STD	SUBJECT	COMPLIANCE	
		ARROW 1	ARROW 2
16/6	Position of Automatic Pilot Controls	Note 3 NA	Note 2 NO
16/7	Location of the Various Controls Affecting the Operation of the Landing Gear of Fixed Wing Aircraft	Note 1 PAR	Note 1 PAR
16/8	Position of Map Stowages in Pilot's Cockpit	Note 3 NA	Note 3 NA
16/9	Illumination of Pilot's Instrument Panel and Station	Yes	Yes
16/11	Position of Pilot Operated Navigation and Radio Controls	Yes	Yes
16/12	Services Operable from Stick Grip	Yes	Yes
16/13	Emergency Control Colour Scheme	Yes	Yes
16/14	Emergency Control of Jettisoning External Stores	Note 3 NA	Yes
16/15	Location of Jet Engine Instruments	Note 3 NA	Note 3 NA
17/1	Aircraft Jacking Pads	Yes	Yes
17/2	Hexagon Bolt Head and Nut Sizes	Note 1 PAR	Note 1 PAR
17/3	Identification of Pipe Lines	Yes	Yes
17/4	Fuel Nozzle Grounding Plug and Socket	Yes	Yes
17/6	Tire Valve Couplings	Yes	Yes
17/7	Aircraft Towing Attachments	Yes	Yes
17/8	Grease Nipples	Note 1 PAR	Note 1 PAR
17/9	Aircraft Emergency Towing Attachments	Note 2 NO	Note 2 NO
17/11A	Diameters for Gravity Filling Orifices	Yes	Yes
17/12	Angles of Head for Countersunk Rivets	Yes	Yes
17/13	Aircraft Cabin Pressurizing Test Connections	Note 1 PAR	Note 1 PAR
17/14	Tire and Rim Sizes of Aircraft Landing Wheel Tires of Inflation Pressures Greater than 90 P.S.I.	Note 1 PAR	Note 1 PAR
17/15	Screw Threads and Hexagons for Pipe (Tube) Fittings	Note 1 PAR	Note 1 PAR
17/16	Preferred Screw Threads for Sizes Below 1/4 Inch for Aeronautical Use	Yes	Yes
17/17	Tolerances for Across Flat Dimensions of Hexagons for Aeronautical Bolt Heads and Nuts	Note 1 PAR	Note 1 PAR
17/18	Drill Depth and Full Thread Depth for Tapped Bosses and Holes for Pipe (Tube) Fittings	Note 1 PAR	Note 1 PAR

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ISSUE 2

Sheet 4

ABC STANDARDS AND NATO STANAGS

COMPLIANCE WITH

ARROW 1 & 2

STANAGS	SUBJECT	COMPLIANCE	
		ARROW 1	ARROW 2
3026	Grease Hydrocarbon Resistant	NA Seet Note 3	NA + R
3197	Parachutes and Survival Packs in Ejection Seat Aircraft	Yes	Yes
3198	Functional Standardization Requirements of Aircraft Oxygen Regulators and the Oxygen Masks	See Note 3	See Note 3
3199	Emergency Oxygen Sets	See Note 3	See Note 3
3200	Anti-G Suits	Yes	Yes

Where Draft Standards are the only Data Available
We cannot assume Compliance with the Final Form

PAR - Partial (See Note 1)
NO - Not Complied With (See Note 2)
NA - Not Applicable (See Note 3)

ABC STANDARDS AND NATO STANAGS

COMPLIANCE WITH

ARROW 1 & 2

AIR STD	STATUS NOTES	APPLICABLE	
		ARROW 1	ARROW 2
<u>Note 1</u>	<u>Partial Compliance</u>		
13/2	Paragraph 6(a) A Fahrenheit Scale Skin Temperature Gauge has been designed for Arrow 1	1	
16/1	Speed - Complied with	1	2
	Attitude - Top Row centre instead of top row right		
	Heading - Lower Row centre instead of top row centre		
	Height - Top Row right instead of lower row right		
	Approach Aid - Top Row centre instead of lower row centre		
	Vertical Speed complied with	1	2
16/7	Paragraph 6(a) Immediately forward, but not above due to Space Limitations	1	2
17/2	AN3 to AN20 Series agree with the Air Std with one exception the 7/16 diameter Bolt. The AN Head size is 5/8, the Air Std size is 11/16. This also applies to Avro Special Bolts	1	2
17/8	Press Fit Base and Fittings with Angles 67½ Degrees are used	1	2
17/13	Paragraph 7 Our connection is a female 7/16-20NF3 Paragraph 8 Our connection is a female 1/8-27AN Pipe Thread	1	2
17/14	The Main Landing Wheel Tires are not listed in the Air Std (29 X 7.7)	1	2
17/15	Across Flats of Hexagon Dimensions are not complied with in Company's Standard Fittings	1	2
17/17	In 10-32 size, AN3, AN173, NAS464, & MS20033 do not comply	1	2
17/18	Fittings at Bulkheads Re-Designed to permit omission of "O" Rings. This requires different Drill and Thread Depths	1	2
<u>Note 2</u>	<u>Not Complied With</u>		
16/6	Not complied with - Located on left hand side		2
17/9	Not complied with due to Space Limitations of Wheel Well	1	2

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ABC STANDARDS AND NATO STANAGS

COMPLIANCE WITH

ARROW 1 & 2

AIR STD	STATUS NOTES	APPLICABLE	
		ARROW 1	ARROW 2
<u>Note 3</u>	<u>Not Applicable</u>		
13/1	Warning Lights Fitted	1	2
15/1 } to 15/12 }	These Affect International Terminology Dealing with Petroleum and Related Products and do not affect Aircraft Manufacturers	1	2
16/6	Not Fitted	1	
16/8	Stowage not Fitted	1	2
16/15	Thrust Indicators Fitted	1	2
<u>Stanags</u>			
3026	This affects International Terminology dealing with Petroleum and Related Products <u>and</u> does not affect Aircraft Manufacturers	1	2
3198 } 3199 }	These refer to Oxygen Regulators and Masks, and as these are Government Furnished Equipment Items we cannot verify that compliance is met	1	2

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AVRO AIRCRAFT LIMITED
STANDARDS REPORT 71/STDS/2

TITLE

LIST OF
PROPRIETARY MATERIALS

ARROW 1

Compiled By DL: *SKA*

Approved By *DR Closson*

ISSUE 1

FEBRUARY 5TH, 1958

AVRO AIRCRAFT LIMITED
AIRCRAFT ENGINEERING DIVISION

71/STDS/2

Sheet 1

TITLE

LIST OF
PROPRIETARY MATERIALS

ARROW 1

This report lists the materials that are called on Arrow 1 drawings by their proprietary or commercial designations.

Part I list those materials which do not comply with any specifications or have any form of approval.

Part II lists those materials which have been called up by commercial designations but now have specifications or some form of approval.

In many cases the materials shown have a range of thicknesses or sizes, all of which may or may not be called up, therefore only the basic materials and/or numbers are shown.

71/STDS/2
Sheet 2
Part 1

MATERIALS WITHOUT
SPECIFICATIONS OR APPROVAL

<u>Material</u>	<u>Vendor</u>	<u>Number</u>
Adhesive & Cement	Shell Oil Company	Epon VI
	Dominion Anilines and Chemical	Penacolite G-1124A
	Dominion Rubber Company Limited	DR-54029
	A.A. Anderson Company Limited	#32 Sauerisen
	Minnesota Mining	EC1300L
	Dow Corning Silicones Limited	6-127 Silastic 6-128 Silastic A4000 Silastic A4011
Cable	J.A. Ræbling's Sons Company Division Colorado Fuel and Iron Corporation	1/16 dia 6 X 7 cotton core preformed galvan- ized aircord
Compound for Sealing or Filling	Dow Corning Silicones Limited	C-271
	Pro Seal	#700
	Shell Oil Company	Epon 828
Conduit	Bowden Engineers Limited	T2H
Flux	Alloy Metal Sales	Black Brazing Flux
Insulating Blankets	H.I. Thompson Company	3/8 FB-1 Refrasil 1" thick #132003
Laminated Tube	Laminex Industries Incorporated	(Wall & O.D.) Laminex Tuff Tube

71/STDS/2
Sheet 3
Part 1

MATERIALS WITHOUT
SPECIFICATIONS OR APPROVAL

<u>Material</u>	<u>Vendor</u>	<u>Number</u>
Nylon Strip (Caterpillar Grommet)	Nylon Molding Corporation	NMC-G-51HA
Primer	Dow Corning Silicones Limited	#796
Rubber-foam	Armet Industries - or Dominion Rubber	#250 Dow Silastic Sheet
Rubber and Asbestos	Bestobell (Canada) Limited	R103 Bellprene Sheet BAS-29 Type J-29 Tape
Rubber- Silicone	Bakelite	*Union Carbide K1034R Sheet
Silicone Based Fluid	Dowty Equipment of Canada Limited	Dowcan D200
Welding Rod	Firth Brown Steels	Armco 17-7PH

*The material as we want to use it is not covered by a specification however this material does meet AMS 3301B

71/STDS/2
 Sheet 4
 Part II

MATERIALS WITH
 SPECIFICATIONS OR APPROVAL

<u>Materials</u>	<u>Vendor</u>	<u>Number</u>	<u>Spec</u>	<u>Approval</u>
Adhesive & Cement	Minnesota Mining	EC 1291	M-14-2	} Met. Lab Report M3414
		EC 1293	M-14-2	
Compound for Sealing	Products Research	PR 1421B	M-14-3	E.I. GEN 644
		PR 1421A	M-14-2	E.I. GEN 644
Potting Compound	Products Research	PR 1402	M-11-24	(None)
Gaskets	Bestobell (Canada) Limited	Bestobell J80	BS1832/1952 Grade H	(None)
Laminated Tube	Continental Diamond Fibre	Phenolic Rod	LL-31 Type 2 Grade C	(None)
Teflon	Grane Packing Company Limited Chantler and Chantler Limited Garloc Packing Company	Teflon Sheet	AMS 3651	(None)
Steel Mesh	Greening Wire Company	.023" X 7 X 7	FR-C-440 Type 1 Class 1	(None)

Report Number 70/STDS/3 Issue 2
Superseding Gen/STDS/3 Issue 1

AVRO AIRCRAFT LIMITED
ENGINEERING DIVISION

TITLE:

DESIGN AND DATA STANDARDS

INDEX OF

ARROW 1 AND 2

COMPILED BY: S.R.A.,

APPROVED BY: J.R. Closson

Issue Date - November 17, 1958
Contents - 3 Sheets

AVRO AIRCRAFT LIMITED
AIRCRAFT ENGINEERING DIVISION

70/STDS/3 Issue 2
Sheet 1

TITLE:

DESIGN AND DATA STANDARDS

INDEX OF

ARROW 1 AND 2

The following is an index of Avro Aircraft Limited design and data standards, which are applicable to the ARROW 1 and 2 aircraft. These standards form a part of, and/or complement the ARROW drawings. Standards as listed herein, are not necessarily referred to on all aircraft drawings. However, they are applicable where pertinent, to aircraft parts and assemblies unless specific information conflicting with the standard appears on an aircraft drawing.

The latest issue of any design standard will normally be used for design and production. Issues listed in the following index are those in current use at the date of issue of this index.

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70/STDS/3
 Sheet 2
 Issue 2

DESIGN AND DATA STANDARDS

NUMBER	ISSUE	SUBJECT
CS-D-1	2	Limits and Fits
CS-D-2	5	Protective Treatment Schedule (Landplanes)
CS-D-7	14	Identification of Pipe Lines
CS-D-11		Aircraft Standard Tolerances
Sect. 1	2	Cable Assemblies
Sect. 2	1	External Contours
Sect. 3	2	Static Skin Gaps
Sect. 4	3	Flushness - Countersunk Rivet Heads
Sect. 5	3	Standard Tolerances and Surface Finishes for Holes
Sect. 6	5	Standard Machining Tolerances
Sect. 7	4	Locking Wire Hole Tolerances For Special Bolts
Sect. 8	2	Static Gap Allowances - Internal Butt Joints
Sect. 9	3	Flushness - Countersunk Bolt and Screw Heads
Sect. 10	4	Sheet Metal Parts
Sect. 14	1	Tube Bending
Sect. 15	1	Edge Distance - Fastener
CS-D-12	4	Machined Countersunk Holes for Rivets and Screws
CS-D-15	5	Marking of Aircraft Parts for Identification
CS-D-17	4	Bearing Retention

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70/STDS/3

Sheet 3

Issue 2

DESIGN AND DATA STANDARDS

NUMBER	ISSUE	SUBJECT
CS-D-19	3	Machined Countersunk Holes For Receiving Ram Coin Dimpled Sheet
CS-D-20	2	Breaking of Sharp Edges
CS-D-21	3	Standard Circular Flanged Lightening Holes
CS-D-22	1	Nameplates and Labels
CS-D-24	1	Pipe Clearances
CS-D-25	1	Serrations, Standard, For Use on Flat Surfaces

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AVRO AIRCRAFT LIMITED
STANDARDS REPORT - GEN/STDS/5

TITLE:

LIST OF
ARROW
PROPRIETARY HARDWARE

COMPILED BY: SLA

APPROVED BY: SL Clissom

ISSUE 1

DECEMBER 12, 1957

AVRO AIRCRAFT LIMITED
AIRCRAFT ENGINEERING DIVISION

GEN/STDS/5

Sheet 1

TITLE:

LIST OF

ARROW

PROPRIETARY HARDWARE

The proprietary hardware items shown in Parts I and II of this report are called up on Avro Aircraft Limited drawings for the Arrow.

In many cases the items shown have a range of sizes available, most of which are called up, therefore only basic series numbers are shown.

Part I pages 2-14 lists items which cannot be purchased to standard drawings and have not been approved.

Part II pages 15-18 lists items which have been called up by commercial numbers but now have military, national or Company standard drawings, or have some form of approval as indicated.

LIST OF
 PROPRIETARY HARDWARE
 FOR THE ARROW

<u>PART</u>	<u>VENDOR</u>	<u>TYPE OR PART NO.</u>
Band	Bendix Aviation Corporation	1080175
Bearing	Kahr Bearings	HRBL HSB HSBG KSBG
	Fafnir Bearing Company	B500 DD KP-BS P4K S
	Torrington Bearing Company	B GB
	Heim Bearing Company	LSS
	Norma Hoffman	S
Blanket	H.I. Thompson Products	V014
Bracket	Tinnerman Products Incorporated	A8567
Button	McMaster Carr	51067
Cable	Bowden Engineers Limited	P-19-1
Cap, Dust	Cannon Electric Canada Limited	2209-5
Chain	Roylyn Incorporated	RS 177-4
Circuit Breaker	Spencer Thermostat Division of Metals and Controls Corporation Mechanical Products Ins.	PSA10 D6752-2-2D PLA-50 Miniature
Bolt	Standard Pressed Steel Company	EWB18 EWB22

LIST OF
PROPRIETARY HARDWARE
FOR THE ARROW

<u>PART</u>	<u>VENDOR</u>	<u>TYPE OR PART NO.</u>
Clamps (& Clips)	Marman Products Company	321
		325
		326
		421
		820
	Titeflex Incorporated	218
		X218
	Tinnerman Products Incorporated	A2927
		A2946
		A2972
		A3187
		A8567
	Wittek Manufacturing Company	WWD22
	Burndy Canada Limited	HP4N
	Adel Division of General Metals Corporation	432
		440
		441
		443
		444
		445
		598
		732
		735
		738
		750
		750HT
		752
		752HT
		754
		754A-HT
		755
		755S
		755AE

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Sheet #4
PART I

LIST OF
PROPRIETARY HARDWARE
FOR THE ARROW

<u>PART</u>	<u>VENDOR</u>	<u>TYPE OR PART NO</u>
Clamps (& Clips) (Cont'd)		755HT 758 758HT 759 782HT 796 82626 82626S
Collar	Huck Manufacturing Company	LC-C LC-F LC-R
Conduit	Bowden Engineers Limited	BlH
Connectors (See also adaptors)	Dage Electric Company Incorporated	1-300-1 1-317-1 1-332-1 1-333-1 1-350-1 1-627-1 1-672-1 1-690-1 1-697-1 1-698-1 1-728-1 5-192-1 5-193-1

LIST OF
PROPRIETARY HARDWARE
FOR THE ARROW

<u>PART</u>	<u>VENDOR</u>	<u>TYPE OR PART NO.</u>
Connectors (Cont'd) (See also adaptors)	Cannon Electric Canada Limited	K-02-21-30SN K-03-16-10PN K-03-16-10SN K-03-19-20SN K-03-21-30PN K-03-21-30SN K-03-21-30SV UES-12-11
	Bendix Aviation Corporation	10-101-323-6-7S PYGMY
	American Phenolic Corporation	165-10-1000
	Walter Kiddee & Co. Inc.	840769 840770
Controller	Normalair Canada Limited	511720
Coupling	E.B. Wiggins Oil Tool Company	3608 3601-D 3651-D
	Marman Products Company	601-S 621-S 24502 4353-S 4369-S 4370
Cover	Henry Manufacturing Company	394 395 397 398 31097-397-1-6
Cup	Cannon Electric Canada Limited	22242 22243 22244
	Dzus Fastener Company	PC3 $\frac{1}{2}$
Exchanger	Airesearch	83940
Extension	Cutler Hammer Incorporated	24-1164-2

LIST OF
 PROPRIETARY HARDWARE
 FOR THE ARROW

<u>PART</u>	<u>VENDOR</u>	<u>TYPE OR PART NO.</u>
Fastener	Camloc Fastener Corporation	4R1 4S7 KM844-1
	Dzus Fastener Company	3-30 F-3
Ferrule	Burndy Canada Limited	YIC YOC PN3954
Fitting (Grease)	Lincoln Engineering Company	5033 5043 5131 5385 5385
Flange	Marman Products Incorporated	16933
Flasher	Tung-Sol Lamp Electric Inc.	606
Fuse	Littlefuse Incorporated	413003 413016 413500
Gasket	Marman Products Incorporated	17189 17189C 24096
Grommet	Camloc Fastener Corporation	4002H
Housing	Simmonds Aeroaccessories Limited	117206
Holder (Fuse)	Littlefuse Incorporated	442006 442001
Hose	Chicago Metal Hose Corporation	RF-40-OP RF-4D-EF

LIST OF
 PROPRIETARY HARDWARE
 FOR THE ARROW

<u>PART</u>	<u>VENDOR</u>	<u>TYPE OR PART NO.</u>
Inserts	Rosan Incorporated	R100SB R200SB RA200SB RD200SB RD9000SB
Junction Shell	Walter Kiddee & Co. Inc. Cannon Electric Canada Limited	209842 2120-10 2245-9
Knob	Airmark Plastic	45-20
Latch	Hartwell Aviation Supply Company	H48 H7200D H7200S H7215B H9325
	Simmonds Aerocessories Limited	117200 117202 117206 117253 117455 117456 117458 117465 117466 117753 117755 117756 117757
Light Assembly	Grimes Manufacturing Company	A8285-24 B3550-307
Lock Ring	Rosan Incorporated	RL335B

LIST OF
 PROPRIETARY HARDWARE
 FOR THE ARROW

<u>PART</u>	<u>VENDOR</u>	<u>TYPE OR PART NO.</u>
Lug	Cannon Electric Canada Limited	211-0006-011 211-0006-014 211-0006-028
Mounts	U.S. Rubber Company	A301
	Electronic Components Ltd.	1901-1
	Barry Control Limited	B43BA6
Nipple	Bowden Industries	PN1963
Nuts	Elastic Stop Nut Corporation	A5, A7 & NA7 A17A, A17 A21 & NA21 A35 A41 NA101 A2500 EB NC Z1825 Z1835 ZEB1845 22K3 LHA3022 1452 2452 2552
	Kaynar Manufacturing Company	F1934 F2000-10 F5000-10 GH1000 K1200 MF1000 MK2031
	Nut Shel Company	K1900 2600HT 6600EW
Panel	Minneapolis - Honeywell Regulator Co.	AD460846
Nuts	Standard Pressed Steel Company	EWN22

LIST OF
 PROPRIETARY HARDWARE
 FOR THE ARROW

<u>PART</u>	<u>VENDOR</u>	<u>TYPE OR PART NO.</u>
Pin	Monadnock Mills	99785-2
	Aviation Developments Canada Limited	9255A A-403 A-415
Plate	U.S. Rubber	FCB-20441
Plug - Button	United Carr Fastener Corp.	HS48172
Pulley	Fafnir Bearing Company	FL3C6 FL3C3
Receptacle (See also Adaptors)	Monadnock Mills	99967 C098
	Cannon Electric Canada Ltd.	2120
	Camloc Fastener Corporation	KM844 4F2 4R1-14 4R1-14A 4R1-16 22-12D 26R5-1 212-12 212-12A 212-12D 212-12N 212-125 2600-212 4002-214 MRE-34H/SK
	Winchester Electronics	MRE34SG
Retainers	Elastic Stop Nut Corporation	2552RET

LIST OF
 PROPRIETARY HARDWARE
 FOR THE ARROW

<u>PART</u>	<u>VENDOR</u>	<u>TYPE OR PART NO.</u>
Retainers (Cont'd)	Nutt Shel	6800 6800D
Ring	Rosan Incorporated	REA48 RL18SB6 RL21 RL24 RL28 RL33
	Waldes Kolinoor Incorporated	5000-425
	Camloc Fastener Corporation	4S9 45-10-1 4002R4G
	Parker Appliance Company	27-7 27-9
Rivet	Huck Manufacturing Company (Deutsch)	6950 6951

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GEN/STDS/5
Sheet #11
PART I

LIST OF
PROPRIETARY HARDWARE
FOR THE ARROW

<u>PART</u>	<u>VENDOR</u>	<u>TYPE OR PART NO.</u>
Rivet (Cont'd)	National Screw Manufacturing Company	(Jo-Bolt) PA200
	Franklin C. Wolfe Co., Inc.	630-041
	Cherry Rivet Company	CR174 CR175 CR517
	E.I. Dupont De Nemours & Co.	P56S 134-100 PN134A PN134-100
	Pastushin Industries Inc.	11101 ADJ 22201 ADJ
	Hi Shear Rivet Tool Company	HS48

LIST OF
 PROPRIETARY HARDWARE
 FOR THE ARROW

<u>PART</u>	<u>VENDOR</u>	<u>TYPE OR PART NO</u>
Rod End	Heim Bearing Company	HM4 HML4
	Fafnir Bearing Company	RE4M
	Kahr Bearings Division of Aetna Steel Products Cor.	HE3 HE3SPN HEL5SPN
Roller	Torrington Bearing Company	H230 Q R10813
Seal	Pratt & Whitney	225420
	Franklin C Wolfe Co. Inc.	250-615 350-615 350-630U 360-642 600-601 630-041
Shims	Camloc Fastener Corporation	4R20 4R31
	Thomas Associates	TA-207
Shock Mount	Barry Controls	M22BA22
	Robinson Aviation Inc.	7002L2
Sleeve	Marman Products Incorporated	504
Spring	DZUS Fastener Co., Inc.	PS3 $\frac{1}{2}$ S3-200 S3-225
	Camloc Fastener Corporation	2600ES
Stabilizer - Unit	Robinson Aviation Inc.	939-23
Stop	Bowden Engineers Limited	PN484
Strap	Adel Division of General Metals Corporation	688

LIST OF
 PROPRIETARY HARDWARE
 FOR THE ARROW

<u>PART</u>	<u>VENDOR</u>	<u>TYPE OR PART NO.</u>
Strap (Cont'd)	Marman Products Incorporated	2335-63-300 2339-63-300
Stud	Dzus Fastener Company Inc.	F3-25 PF3 $\frac{1}{2}$
	Monadnock Mills	98264
	Camloc Fastener Corporation	26R51 4S15 5S13 265-8-2 2600 2658 2700 4002
	Rosan Incorporated	SF102
Switch	Cutler Hammer Incorporated	76 88
	Electro snap Switch Manufacturing Company	J2-4
	J.R. Longstaffe	HI-37
	Simmonds Aeroaccessories Limited	117754
	Meletron Corporation	415-10-19
	Micro Switch Division of Minneapolis - Honeywell Regulator Co.	9AC4 21EN9-6
Tee	E.B. Wiggins Oil Tool Co.	3752
Terminal	Henry Manufacturing Company	397
	Aircraft Marine Products Inc.	32065
	Burndy Canada Limited	YAV, YBV

LIST OF
 PROPRIETARY HARDWARE
 FOR THE ARROW

<u>PART</u>	<u>VENDOR</u>	<u>TYPE OR PART NO.</u>
Throttle Box	J.K. Keeneth Corporation	5L3380
Toggle	Simmonds Aerocessories	117203 117205 117466
Valve	Airesearch Manufacturing Co.	106334 108298
	Aero Supply Manufacturing Co.	74557-12
	Parker Aircraft Company	4-843-29
	Surface Combustion Corp.	Corp. 27C34
	Eckel Valve Company	CAF40-772 224A-4TT
Washer	Camloc Fastener Corporation	28S10 2600SW 2700LW 2800SW
	Franklin C. Wolfe	800-001
	Standard Pressed Steel	PO 716 L WC 22 WP 22 PL1 22 PL1 18 459
Window	Airtron Incorporated	54500

LIST OF
PROPRIETARY HARDWARE

GEN/STDS/5
Sheet 15
Part II

FOR THE ARROW

<u>PART</u>	<u>VENDOR</u>	<u>TYPE OR PART NO.</u>	<u>STD. DWG. NO.</u>	<u>APPROVAL</u>
Bearing	Fafnir Bearing Company	DSP	AN206	QPL7949
		KP	AN200	QPL7949
		KP-A	AN201	QPL7949
		KP-B	AN202	QPL7949
		KS	AN200	QPL7949
		KS-L	AN200	QPL7949
	Torrington Bearing Company	NBC	NAS505	ANAL47
		NBF	NAS502	ANAL47
		NCC	NAS506	ANAL47
Clamps (& Clips)	Tinnerman Products Incorporated	A30114	-	Avro EI Gen. 683
Collar	Hi Shear Rivet Tool Company	HS 15	NAS528	ANAL47
Inserts	Heli Coil Corporation	1191-C	MS124651-850	-
		1191-CN 3591-CN	MS124651-850 -	(1)
Nuts	Elastic Stop Nut Corporation	A1 & NA1	AN366	ANAL59
		NA5 & NA5A	NAS1027	ANAL47
		NA17 & NA17A	NAS1025	ANAL47
		A27	NAS1033	ANAL47
		NA35	NAS1028	ANAL47
		A38 & NA38	AN373F	ANAL59
		NA797	NAS1029	ANAL47
		NAJ1	AN363DF	ANAL59
		NAJ17	NAS1025	ANAL47
		NAJ24	NAS1026	ANAL47
		12LHA1	AN362F	ANAL59
		12LHA5	NAS1027	ANAL47
		12LHA401	NAS1031A	ANAL47
		22NGL	NAS1034-38	ANAL47
		22TM	AN364	ANAL59
		52LHTA517	NAS687	ANAL47
		52LHTA55M	NAS698	ANAL47
		52ZA5	NAS1027A	ANAL47
		52ZA17	NAS1025A	ANAL47

<u>PART</u>	<u>VENDOR</u>	<u>TYPE OR PART NO.</u>	<u>STD. DWG. NO.</u>	<u>APPROVAL</u>
Nuts (cont'd)	Standard Pressed Steel Tinnerman Products Inc. Kaynar Manufacturing Company	22FT	AN364	ANA159
		A8939-632	NAS487	ANA147
		F5031	NAS1031	ANA147
		G1000	NAS688-692	ANA147
		G1100	NAS693-695	ANA147
			1039-1041	
		H10	AN363,364,365	ANA325
		K1000	AN362	ANA325
		K1100	AN361	ANA325
		K1901	NAS1029	ANA147
	Nutt Shel Company	K2100	NAS683,1026	ANA147
		K3000	NAS634,1027	ANA147
		K3100	NAS1027	ANA147
		MK1000	NAS697 For 08	ANA147
		MK2000	NAS696 -3 & -4	ANA147
		MK3000	NAS698 For 08	ANA147
			-3 & -4	
		MK4000	NAS1067, -3 & -4	-
		ML2600	NAS697 For 08	ANA147
		ML2610	NAS696 -3 & -4	ANA147
		ML2620	NAS698	ANA147
		ML2640	NAS1067 ONLY	ANA147
		2600	AN362F	ANA325
		2610	NAS1025	ANA147
Pin	Elastic Stop Nut Corporation	52-028-125	MS9048	
		52-032-156	MS9048	
		52-040-187	MS9048	
		52-028-125	MS9048	
		72-022-094-050	MS171492-512	
		79-022-094	MS141492-512	
		79-040-187	MS171583-608	
Rivet	Huck Manufacturing Company (Lockbolts)	9SP-B	-	(3) QPL7885
		ACT509HE	-	(7)
		ACT509HT	-	(7)
		ACT509NT	-	(7)
		ALP426E	-	(7)
		ALP426HE	-	(4 & 7)
		ALP426HT	-	(7)
		ALP426NE	-	(4 & 7)
		ALP509HE	-	(7)
		ALP509HT	-	(7)
		ALP509NT	-	(7)

<u>PART</u>	<u>VENDOR</u>	<u>TYPE OR PART No.</u>	<u>STD. DWG. NO.</u>	<u>APPROVAL</u>
Rivet (cont'd)	Huck Manufacturing Company (Lockbolts)	ALPBHE	-	(7)
		ALPPHE	-	(4 & 7)
		ALPPHT	-	(7)
		ALPPNE	-	(4 & 7)
		ALPPNT	-	(7)
		ALS509E	-	(7)
		ALSFE	-	(7)
		ALSFT	-	(7)
		ASCT509E	-	(7)
		ASCT509T	-	(7)
		BL	-	(5)
		RL028HT	-	(2)
		RL028NT	-	(2)
		SAL PT	-	(6)
	National Screw (Jo-Bolts) Manufacturing Company	F164	-	(8)
		F200	-	(9)
		F260	-	(9)
		F312	-	(8)
		F375	-	(8)
		FA164	-	(8)
		FA200	-	(9)
		FA260	-	(9)
		P164	-	(8)
		P200	-	(9)
		P260	-	(9)
		P312	-	(8)
	Cherry Rivet Company	CR162	MS20601	(10) QPL 7885
		CR163	MS20600	(10) QPL 7885
		CR562	CS-R-110	
		CR563	CS-R-109	
	E.I. Dupont De Nemours & Company.	56S 134A	MS20602B	QPL7885
	Hi Shear Rivet Tool Company	HS37P	NAS525	ANAL47
		HS38P	NAS529	ANAL47
Rivet	Huck Manufacturing Co.	CKL-P		(11)
		CKL-100V		(11)

- (1) Wright Air Dev. WCLSJ3 Dated Dec. 28/55.
- (2) Wright Air Dev. WCNSJ1 Dated Aug. 19/52
- (3) Wright Air Dev. MCREXA71 Dated July 7/50
Dept. of the Navy AER-AE/62-63561 Dated Aug. 15/50
- (4) Dept. of the Navy AER-AE622/263 Dated Dec. 21/54
Wright Air Dev. WCLSJ3 Dated Aug. 9/54
- (5) Wright Air Dev. MCREXA71 Dated July 5/50
Dept. of the Navy AER-AE-332 Dated Feb. 7/51
- (6) Wright Air Dev. WCLSJ1 Dated July 6/53
- (7) Huck Lock Bolts and Lockbolt Stumps Accetable as Per ANC5 Paragraph 3.6116
- (8) Dept. of the Navy Letter AER-AE-6331/4 Dated Jan. 23/57
- (9) Dept. of the Navy Letter AER-AE-624/98 Dated May 18/54
- (10) Dept. of the Navy Letter AER-TD-21/402 Dated Aug. 25/55
- (11) Naval Air Material Center
Naval Air Experimental Station
Letter XM-62-JJ43(999) dated January 6th, 1948.

Report Number GEN/STDS/6 Issue 2
Supersedes GEN/STDS/6 Issue 1

AVRO AIRCRAFT LIMITED
ENGINEERING DIVISION

TITLE:

HARDWARE
COMPANY STANDARD (CS)
INDEX OF

COMPILED BY: S.R.A.

APPROVED BY: L.R. Clouston

Issue Date - November 17, 1958
Contents - 9 Sheets

AVRO AIRCRAFT LIMITED
AIRCRAFT ENGINEERING DIVISION

GEN/STDS/6
Issue 2
Sheet 1

TITLE:

HARDWARE
COMPANY STANDARD (CS)
INDEX OF

The following is an index of Avro Aircraft Limited Company Standard (CS) hardware which may be applicable to the Arrow Aircraft.

As this is a hardware index it does not list castings, forgings, extrusions, rolled sections, stampings, moulding, hinges, test pieces or equipment covered by Avrocan Equipment Specifications. ←R

INDEX OF
COMPANY STANDARD HARDWARE

GEN/STDS/6
Issue 2
Sheet 2

<u>PART NO.</u>	<u>ISSUE</u>	<u>TITLE</u>	
CS-A-101	3	Adaptor-Pipe-Fuel system (inactive for new design)	
CS-A-102	2	Adaptor-Pipe-Fuel system	
CS-A-103	1	Adaptor-AN Connector to Clamp	
CS-A-104	1	Adaptor-Electrical Accessory to Cable	
CS-A-105	1	Actuator-Limit Switch	
CS-A-107	1	Adaptor -AN Connector to Clamp	
CS-A-108	1	Adaptor -Pipe-Fuel System	
CS-A-109	1	Adaptor -Backshell-Connector	
CS-B-101	1	Bracket-Grounding Clip	← R
CS-B-102	6	Bars - Electrical Jumper - .59" Centers	
CS-B-103	6	Bars - Electrical Jumper - .75" Centers	
CS-B-104	4	Bars - Electrical Jumper -.812" Centers	
CS-B-106	1	Bars - Electrical Jumper	
CS-B-107	2	Ejector Blade (For Dzus Fastener)	
CS-B-108	2	Ejector Blade (Swivel)	
CS-B-109	2	Bracket - Clip (Electrical Cable)	
CS-B-110	1	Bracket - Clip (Electrical Cable)	
CS-B-111	2	Bracket Assembly - Clip (Electrical Cable)	
CS-B-112	1	Bracket - Clip	
CS-B-113	2	Bracket - Clip - Piping Services	
CS-B-114	2	Bracket - Piping Services	← R
CS-B-115	2	Braid - Tinned Copper	
CS-B-116	1	Bracket - Clip	
CS-B-117	1	Bracket Assembly - Clip (Electrical Cable)	← R
CS-B-118	1	Bushing - Cable	
CS-B-119	2	Bearing - Spherical	
Thru-126			
CS-B-127	2	Bearing - Rod End	
CS-B-128			
CS-B-132			
CS-B-129			
CS-B-130	1	Bearing - Rod End	
CS-B-131	1	Bearing - Rod End - Weld Type	
CS-B-133			
AND-134	1	Bearing - Rod End - Weld Type	
CS-B-137	1	Bolt - 100° Flat Head Structural, Sealed	← R
CS-B-143	2	Bracket - Grounding Clip	
CS-B-144	1	Bracket - Clip (Electrical Cable)	
CS-B-145	1	Bracket Ass'y Clip (Electrical Cable)	
CS-B-173	2	Bolt Machine, Hex Head 1200°F (Inactive for New Design)	
Thru-186			
CS-B-187	2	Bearing - Self - Aligning - Ball	

<u>PART NO.</u>	<u>ISSUE</u>	<u>TITLE</u>	
CS-C-101	3	Collar - Tube Clamp	
CS-C-102	3	Tube - Bolt	
CS-C-103	4	Clamp - Steel - Welded Assembly for (Long Bolt Tube)	← R
CS-C-104	3	Clamp - Half Steel	
CS-C-105	2	Clamp - Half Steel	
CS-C-106	1	Clamp Tube	
CS-C-107	2	Clamp - Tube (Long Bolt Tube)	
CS-C-108	1	Clamp - Tube (Long Bolt Tube)	
CS-C-110	4	Clip - Single Hole Lug Mtg. - Cushioned	
CS-C-112	2	Cable - Standard Spliced	
CS-C-113	4	Clip - Hose Pipe (Inactive For New Design)	
CS-C-114	3	Clamp Cable (British Threads)	
CS-C-115	4	Nut Gland (British Threads)	
CS-C-116	3	Clamp - Saddle	
CS-C-117	1	Cover for Micro-Switch	
CS-C-118	1	Clip - Cable Support	
CS-C-121	2	Cover Blanking - For Electrical Receptacles	
CS-C-122	1	Clamp Cable	
CS-C-123	2	Nut-Gland	
CS-C-124	1	Card - Frequency - Blank	
CS-C-125	2	Control - Volume - Dual Concentric	
CS-C-126	1	Connector - Assembly - Pipe - Fuel	
CS-C-127	1	Cover Plates - Dial Instruments	
CS-C-128	1	Connector Assembly Pipe - Fuel	
CS-C-129	4	Cables - Shielded - Jacketed signal Conductor	
CS-C-130	2	Chain Bead	
CS-C-131	6	Index - Cards - Radio Frequency	
CS-C-132	1	Clip - Pipe - Strap Type	
CS-C-151	1	Clip - Spring	
CS-C-153	1	Clamp - Plain - Tube Support - Loop Type	
CS-C-155	1	Cover Plate	
CS-C-156	2	Cover Plate Assembly	R
CS-C-163	2	Connector - Special - Miniature	
CS-C-164	1	Clamp - Saddle Type - High Temperature	
CS-C-165	2	Clamp - Cushioned (High Temperature)	
CS-C-166	2	Clamp - Tube Support Loop Type (Inactive for New Design)	
CS-C-167	2	Clamp - Saddle Type (Inactive for New Design)	
CS-C-169	1	Clamp - Tube Support Loop Type - High Temperature	
CS-C-173	6	Coupling - Flex. - Med. Press. Female Boss Type	R
CS-C-176	1	Clamp - Half	
CS-C-177	2	Cover Assembly - Pressurized Electrical Connectors	
CS-C-178	2	Collar - Tube Clamp	
CS-C-179	1	Tube - Bolt	
CS-C-180	2	Clamp - Aluminum Alloy Welded Assembly for (Long Bolt Tube)	
CS-C-181	1	Clamp - Half - Aluminum Alloy	
CS-C-182	2	Clamp - Half - Aluminum Alloy	
CS-C-183	1	Clamp Half	← R
CS-C-186	2	Clamp - Special - Saddle Type (Inactive for New Design)	
CS-C-187	2	Cover - Shorting Plug	

<u>PART NO.</u>	<u>ISSUE</u>	<u>TITLE</u>	Sheet 4
CS-C-188	2	Clamps Hose - Tangential Worm Screw Type with Fillister Head	
CS-C-190	1	Dust Cap - Cannon Miniature K02 or Equivalent Type Connectors	
CS-C-189	1	Clamp - Cushioned (High Temp)	
CS-C-191	1	Dust Cap - Cannon Miniature K03 or Equivalent Type Connectors	
CS-C-196	3	Cover Plate for Electrical Connectors	
CS-C-198	3	Coupling - Flexible - Med. Press.	
CS-C-199	3	Coupling - Flexible - Med. Press. - Male Boss Type	R
CS-C-202	6	Clamp - Tube Support - Loop Type	
CS-C-203	5	Clamp - Saddle Type	
CS-C-205	1	Chain - Bead	
CS-C-206	2	Clamp - Waveguide	
CS-C-207	1	Clamp - Waveguide	
CS-F-104	2	Ferrule - Flexible Plastic Tubing (Inner)	
CS-F-105	2	Ferrule - Flexible Plastic Tubing (Outer)	
CS-F-109	1	Ferrule - Steel Wire for Elastic Cord	
CS-F-114	1	Fork - Turnbuckle for Bearing	
CS-F-251	3	Fitting - Tee - Steel - Flareless Tube	← R
CS-F-552	2	Fitting - Special - Aluminum Alloy	
CS-G-101	1	Grommet (For Electrical Adaptor Clamp)	
CS-G-102	1	Grommet (For Electrical Adaptor Clamp)	
CS-G-103	5	Guard - Switch	← R
CS-G-104	3	Gaskets	
CS-G-105	1	Guard - Switch	
CS-G-106	2	Guard - Switch Emergency	
CS-G-107	1	Guard - Switch	
CS-G-111	1	Grommet - Rain Repellant	
CS-G-112	1	Gasket - Flared Tube (High Temp.)	
CS-G-113	3	Grommet High Temperature	← R
CS-G-114	1	Gasket - "O" Ring (High Temperature)	
CS-G-116	1	Gasket - Fuel and Oil Resistant Flared End Tube Fitting Boss - High Temperature Applications	
CS-H-110	1	Hose - Aircraft (Fuel, Oil, Coolant Water and Alcohol)	
CS-H-119	2	Hose - Flexible - High Temperature	
CS-H-120	3	Hose - Flexible - Low Temperature	
CS-I-101	1	Insulator	
CS-I-102	1	Insulation - Blanket Fiber-glass	
CS-I-103	1	Insulation - Blanket Fiber-glass	
CS-I-106	1	Insulation - Blanket Max. Temp. 550°	
CS-I-108	7	Indicator - Warning	
CS-I-109	2	Indicator - Warning Dual	
CS-I-110	1	Inductor - Power	
CS-I-111	2	Indicator - Three Position	
CS-I-122	5	Indicator - Warning Dual	← R
CS-I-123	1	Insulation Blanket	
CS-I-124	2	Identification Strap	
CS-I-125	1	Insulation Blanket	← R

<u>PART NO.</u>	<u>ISSUE</u>	<u>TITLE</u>	
CS-J-103	3	Joint - Flexible - Fluid	
CS-J-105	1	Joint Ball and Socket	
CS-K-101	1	Knob - Lever	
CS-K-102	1	Knob - Lever	
CS-K-103	3	Knob - Fluted Pointer Type	
CS-K-104	1	Knob - Control	
CS-K-105	2	Knob - Special Fluted Skirted	
CS-K-106	1	Knob - Special Fluted	
CS-L-103	1	Lug - Bonding	
CS-L-104	6	Lead - Bonding	
CS-L-105	6	Lead - Bonding	
CS-L-106	13	Lead - Bonding	
CS-L-107	11	Lead - Bonding	
CS-L-108	5	Lead - Bonding	
CS-L-109	7	Lug - Bonding - Crimp Style	
CS-L-110	1	Lug - Bonding	
CS-L-111	2	Lockbolt Collar (Inactive for New Design)	
CS-L-114	5	Lead - Bonding	← R
CS-L-115	1	Lamp - Warning - Dual	
CS-L-116	1	Lug Bonding, Stainless Steel	
CS-L-117	3	Lead - Bonding	
CS-L-118	8	Lead - Bonding	
CS-L-119	2	Label Identification	
CS-L-120	2	Lockbolt - Alloy Steel Pan-Head Non-Hole-Filling Type (Inactive for New Design)	
CS-L-122	2	Lockbolt-Alloy Steel CSK Head 100° Non-Hole-Filling AN 509 Type Close Tolerance. (Inactive for new Design)	
CS-L-124	2	Lockbolt - Stump Flat head (Inactive for New Design)	
CS-L-126	2	Lockbolt - Stump CSK Head 100° AN 509 Type Close Tolerance (Inactive for New Design)	
CS-L-127	2	Lockbolt - Blind (Inactive for New Design)	
CS-L-128	1	Lead - Bonding	
CS-L-130	1	Lug - Flag - Special	
CS-L-131	2	Lug - Bonding - Crimp Style	
CS-L-201	3	Label "Inboard"	R
CS-L-202	3	Label "Outboard"	
CS-L-203	3	Label Switch	
CS-N-102	3	Nut Plate - Self - Locking (Inactive for New Design)	
CS-N-103	2	Nut Plate - Self - Locking Corner (Inactive for New Design)	
CS-N-105	1	Nut - Dome - Anchor 10-32	
CS-N-107	3	Nut-Drilled Jam	
CS-N-108	3	Nut - Steel - Flareless Tube	
CS-N-109	1	Nut - Special Two Lug - 250°F - Removable Nut - Floating	
CS-N-110	2	Nut - Special Two Lug - 450°F - Removable Nut - Floating	
CS-N-111	5	Nuts - Gang Channel - C' Bored - Straight - Narrow 250°F (Inactive for New Design)	R
CS-N-112	5	Nut - Sleeve Coupling - Flareless	
CS-N-113	1	Nut - Thin Electrical	

<u>PART NO.</u>	<u>ISSUE</u>	<u>TITLE</u>	
CS-N-114	2	Nut - Aluminum Alloy - Flareless Tube	
CS-N-115	4	Nut - Aluminum Alloy - Flareless Tube	
CS-N-116	2	Nut - Spanner - Special (Aluminum Alloy)	
CS-N-119	5	Nuts Gang Channel - C'Bored - Straight - Narrow 250°F (Special) (Inactive for New Design)	← R
CS-N-120	2	Nut - Retaining - Steel	
CS-N-121	1	Nut - Cres - Flareless Tube	
CS-N-132	2	Nuts - Self - Locking, Gang Channel, C'Bored, Low Height, 250°F, 450°F	
THRU 135			
CS-N-142	2	Nuts - Self - Locking, Gang Channel, C'Bored, Low Height, 250°F, 450°F (Special)	
THRU 145			
CS-P-107	1	Plate Blank	
CS-P-108	5	Plate Nomenclature	
CS-P-110	2	Pin - Taper (Aluminum Alloy)	
CS-P-111	7	Plate - Identification	R
CS-P-112	2	Pin - Hinge	
CS-P-113	4	Plate - Identification	
CS-P-114	4	Plate - Identification - Special	
CS-P-115	6	Plate - Modification	
CS-P-116	4	Name Plate	
CS-P-117	2	Plate - Identification	
CS-P-118	3	Plate - Identification	
CS-P-119	1	Plate - Inspection	
CS-P-122	2	Plate - Identification - Aluminum Alloy	
CS-P-125	2	Plate - Overhaul - Aluminum Alloy	
CS-P-130	2	Plug - Injection	
CS-P-131	1	Plate - Identification	
CS-P-133	2	Plug - Insert - Flareless Tube	
CS-P-134	1	Plate - Conversion	
CS-P-135	1	Packing - Waveguide	
CS-P-136	2	Plug - Gap Sealing - Structural	
CS-P-141	1	Packing - Tapered - Aluminum Alloy - 2024-T3 or T4	R
THRU 150			
CS-P-151	1	Packing - Taper - Magnesium Alloy	
THRU 160			
CS-P-201	4	Plastic Section	
CS-P-202	2	Plastic - Identification Sleeve	
CS-P-203	1	Plastic - Rod	
CS-R-101	3	Rivet - Dome Head Pop (Inactive for New Design)	
CS-R-102	2	Rivet - CSK Head Pop (Inactive for New Design)	
CS-R-103	2	Blind Rivet Assy - 100° CSK Head - Hollow Type Pull Through	
CS-R-104	2	Blind Rivet Assy - Brazier Head - Hollow Type Pull Through	
CS-R-105	2	Blind Rivet Assy - 100° CSK Head - Self-Plugging Type (Inactive for New Design)	
CS-R-106	2	Blind Rivet Assy - Brazier Head - Self-Plugging Type (Inactive for New Design)	
CS-R-107	4	Blind Rivet Assy - 100° CSK Head - Self-Plugging Type (Inactive for New Design)	

<u>PART NO.</u>	<u>ISSUE</u>	<u>TITLE</u>
CS-R-108	4	Blind Rivet Assy - Brazier Head - Self-Plugging Type (Inactive for New Design)
CS-R-109	3	Rivet - Blind Assy - Brazier Head Self-Plugging Type (Monel) (Inactive for Design)
CS-R-110	2	Rivet - Blind Assy - 100° CSK Head Self-Plugging Type (Monel) (Inactive for Design)
CS-R-111	1	Rivet - Blind Assy - Universal Head Self-Plugging (Steel)
CS-R-112	1	Rivet - Blind Assy - 100° CSK Head Self-Plugging (Steel)
CS-R-113	1	Rivet - Conical Keystone Lock - Blind - Brazier Head
CS-R-114	1	Rivet - Conical Keystone Lock - Blind - 100° CSK Head
CS-R-115	1	Blind Rivet Assy - Brazier Head - Oversize Shank Self-Plugging Type
CS-R-116	1	Blind Rivet Assy - 100° CSK Head - Oversized Shank Self-Plugging Type
CS-R-117	1	Rivet Oversize Structural Blind - Standard Head Type
CS-R-124	5	Rivet - Solid Countersunk 100° Special Head Aluminum Alloy (Inactive for Design after August 19th, 1958, use MS 20426 Modified)
CS-R-125	5	Rivet - Blind, Self-Plugging - CSK 100° - Special Head - Aluminum Alloy (Inactive for Design)
CS-R-128	4	Relay, 50 Amp S.P.D.T. Class A (Inactive for Design)
CS-R-129	6	Ring - Sleeve - Flareless
CS-R-134	1	Ring Sleeve - Thin Wall Tubing
CS-R-136	2	Relay - 2 P.D.T. - 28V - Hermetically Sealed
CS-R-137	1	Relay - 6 P.D.T. - 28V - Hermetically Sealed
CS-R-914	2	Rubber Covered Roller Tube
CS-S-113	6	Identification Strip Blank #6 Terminal Posts
CS-S-114	5	Identification Strip No. 6 Terminal Posts
CS-S-115	6	Identification Strip Blank No. 10 Terminal Posts
CS-S-116	4	Identification Strip No. 10 Terminal Posts
CS-S-117	1	Spring - Aerial Tension
CS-S-118	1	Spring Holder
CS-S-119	1	Spring Holder
CS-S-120	1	Spring Aerial Tension
CS-S-121	1	Spring Holder
CS-S-122	2	Identification Strip
CS-S-123	2	Identification Strip
CS-S-124	1	Spring Holder
CS-S-125	2	Shaft - Flexible - Assembly of Lear
CS-S-126	1	Strap - Quick Release
(1 to 7)		
CS-S-127	2	Strap Buckle
CS-S-128	2	Strap Buckle
CS-S-129	2	Strap Buckle

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<u>PART NO.</u>	<u>ISSUE</u>	<u>TITLE</u>	
CS-S-130	2	Strap Fabric Bracket	
CS-S-131	1	Strap Pin	
CS-S-135	11	Switch - Oak Type	← R
CS-S-136	4	Shaft - Flexible (U.S. Army Signal Corps Type MC-124)	
CS-S-137	1	Strip - Dzus - Mounting (For Control Panel)	
CS-S-138	2	Identification Strip Blank 1/4 - 5/16 - 3/8 Terminal Posts	
CS-S-139	2	Identification Strip 1/4 - 5/16 - 3/8 Terminal Posts	
CS-S-140	3	Shaft - Flexible Aircraft Radio Corps 6151 U.S. Army Signal Corps MC-215	
CS-S-141	1	Strip - Dzus - Flat Mounting PR 3 1/2 - 1	
CS-S-142	1	Straps Bonding	
CS-S-143	1	Straps Bonding	
CS-S-144	3	Shaft - Bendix Radio Type AAL5410	← R
CS-S-157	2	Set Screw - Hex Socket Headless	
CS-S-162	4	Shim - Miniature - Anchor Nut - Two Lug	
CS-S-163	1	Sleeve Insert - Stainless Steel	
CS-S-164	1	Screw - Special Round Head Course Thread	
CS-S-165	4	Shim - Miniature Anchor Nut One Lug	
CS-S-166	4	Shim - Miniature Anchor Corner	
CS-T-107	4	Tube Assembly (Aluminum Alloy)	
CS-T-108	10	Tube Assembly (Corrosion Resisting Steel)	
CS-T-109	5	Tube Assembly (Copper)	
CS-T-111	3	Tube Assembly (Copper)	
CS-T-112	4	Tube Assembly (Copper)	
CS-T-113	4	Tube Assembly (Corrosion Resisting Steel)	
CS-T-117	2	Tube Assembly AN Fittings (Steel) (Corrosion Heat Resisting Stainless Steel)	
CS-T-118	3	Tube Assembly AN Fittings (Dural) Corrosion Heat Resisting Stainless Steel	
CS-T-121	8	Transformer 3 Phase 115V to 28V 400 Cycles 100 V.A.	
CS-T-128	2	Tag - Identification	
CS-T-129	3	Auto Transformer Single Phase 115V 380-1000 Cycles	
CS-T-138	2	Transformer - Power Single Phase 380-420 Cycles	
CS-T-146	1	Transformer - Power	← R
CS-T-156	1	Terminal Fork End Cable For Swaging	
CS-T-176	1	Tag - Identification	
CS-T-178	1	Terminal - Solder	
CS-T-179	2	Terminal - Board	
CS-T-180	1	Terminal Strip	
CS-T-181	2	Terminal Board	

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Issue 2
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<u>PART NO.</u>	<u>ISSUE</u>	<u>TITLE</u>	
CS-T-182	2	Terminal End Cap Crimp Style - Insulating	
CS-T-183	1	Terminal Closed End Crimp Style - Copper Insulated	
CS-T-190	2	Tube Assembly Corrosion Heat Resisting Steel .020 Wall	
CS-T-191	3	Tube Assembly Beaded End and Flareless End	
CS-T-216	2	Terminal - Grounding Stud	
CS-T-225	1	Tee Assy - Cable - Moulded Vinyl	
CS-T-226	2	Tee Assy - Cable - Moulded Silicone Rubber	R
CS-T-227	1	Tag - Identification	
CS-U-101	1	Union - Special	
CS-V-106	1	Valve Charging	
CS-W-101	3	Washer #6 Tapered	
CS-W-102	3	Washer #8 Tapered	
CS-W-103	3	Washer #10 Tapered	
CS-W-104	3	Washer 1/4" Tapered	
CS-W-105	3	Washer #6 Tapered	
CS-W-106	3	Washer #8 Tapered	
CS-W-107	3	Washer #10 Tapered	
CS-W-108	3	Washer 1/4" Tapered	
CS-W-109	1	Washer Saddle	
CS-W-110	1	Washer Saddle	
CS-W-111	1	Washer Distance (For Dzus Ejector Blade)	
CS-W-112	1	Washer CSK (For Dzus Ejector Blade)	
CS-W-113	2	Washer Sealing (Inactive for New Design)	
CS-W-119	1	Washer Countersunk	
CS-W-120	1	Washer - Steel	← R
CS-W-121	4	Washer Aluminum Alloy	
CS-W-123	1	Washer Sealing - O'Ring	
CS-W-124	1	Washer Tapered	
CS-W-125	1	Washer Countersunk - For use with 220,000 psi bolts	
CS-W-126	1	Washer Sealing - O'Ring	
CS-W-133	2	Washer - Duct Restrictor	← R

AVRO AIRCRAFT LIMITED
STANDARDS REPORT GEN/STD/7

TITLE:

SPECIFICATIONS AND STANDARDS:

USE OF

COMPILED BY:

M. A. Aikin

APPROVED BY:

D. R. Clorson

ISSUE 1

NOVEMBER 28TH, 1957.

AVRO AIRCRAFT LIMITED
AIRCRAFT ENGINEERING DIVISION

STANDARDS REPORT
GEN/STDS/7

Sheet 1

SPECIFICATIONS AND STANDARDS:

USE OF

1. Introduction

The design and construction requirements of aircraft for the R.C.A.F. are governed by specifications, bulletins, Canadian Air Publications, handbooks etc.

An Avro Model Specification is written for each particular model which sets forth detail requirements for a particular model.

The Avro Model Specification calls up the relevant R.C.A.F. Air Specification which states, in the case of the Arrow, that the design shall be based on Canadian Air Publication (CAP) 479, and the technical requirements of the Handbook of Instruction for Aircraft Designers ARDCM 80-1.

Certain specifications are made mandatory by (a) specific call up in the AIR Specification, (b) specific call up in the applicable sections of ARDCM 80-1.

R.C.A.F. Engineering Orders (EO's) become mandatory only when included in CAP 479, or where contractually agreed.

2. TYPES OF STANDARDS AND SPECIFICATIONS AND ORDER OF PRECEDENCE

The following types of standards and specifications are in use in the Aircraft Engineering Division and are listed in three groups in order of precedence. The listing in each group is also in order of precedence. This list should be used in all cases unless contract requirements or subsequent specific instructions state otherwise.

Precedence Group	Specifications	Design Standards	Standard Parts
1. Government Standards and Specifications	RCAF DND CGSB FED. *MIL-JAN-AN USAF U.S. Army JCNAAF US Navy BuAer DTD-IS	**ABC **Stanags MIL-STD & MS JAN-STD AND	MS AN JAN USAF
2. Non-Government Standards and Specifications	SAE(AMS) NAS ASTM CSA ASA	NAS SAE(ARP)	NAS SAE(AS)
3. Company and Commercial Standards and Specifications	Avrocan Commercial Proprietary	CS-D-	CS- Commercial Proprietary

Notes:

- * See next page for interservice precedence
- ** Used only when specified by contract

2. (cont'd)

SPECIFICATIONS GROUP I

Specification	Origin	Typical Number	Remarks
R.C.A.F.	Royal Canadian Air Force	Inst 2-2	
DND	Dept. of National Defence	C27-58	Being converted to R.C.A.F. Specifications
CGSB	Canadian Government Specifications Board	43-GP-3A	Lubricants, Paints, Fuels Etc.
FED.	U.S. Federal Supply Services	QQ-A-411	Specifications for all U.S. Federal Agencies
MIL JAN	U.S. Army, Navy, and Air Force Joint U.S. Army-Navy	MIL-C-6021 JAN-W-41 MIL-F-5373B(ASG) MIL-D-8278(USAF) MIL-G-007407B(USAF) 19 November 1953 Use in lieu of MIL-C-7407A(ASG) MIL-F-7147(AER) (BuAer)	These are co-ordinated Specification Symbols (JAN Specifications are being converted to MIL). A parenthetical suffix following the Military Specification symbol denotes a limited co-ordination Specification. Examples: (ASG) Aeronautical Standards Group. Approved for use by the Air Force and BuAer only. Not approved by the Army nor other Technical Services of the Navy. (USAF) United States Air Force. Approved by Air Force only. Not approved by Army or Navy. A double Zero(00) Preceding the serial number in the Specification symbol plus the notation "Used in lieu of" indicated below the specification symbol (on the first page of the Specification) denotes a limited co-ordination Specification. (AER) or (BuAer) Bureau of Aeronautics Navy. Approved by BuAer only. Not approved by Air Force, Army, or other Technical Services of the Navy. Other suffixes used are: (Ships) Bureau of Ships (ORD) Bureau of Ordnance (Navy) Dept. of the Navy

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Sheet 4

2. (cont'd)

SPECIFICATIONS GROUP I (cont'd)

Specification	Origin	Typical Number	Remarks
AN	U.S. Air Force - Navy(BuAer)	AN-QQ-S-685	Being converted to MIL Specifications
USAF	U.S. Air Force	20024	
U.S. Army	U.S. Army	98-20037	
JCNAAF	Canadian Military Electronic Standards Agency (CAMESA)	JCNAAF-C-24	Joint Canadian Navy-Army- Air Force Specification
U.S. Navy	U.S. Dept. of the Navy	47SE	Being converted to MIL Specifications
BuAer	Bureau of Aeronautics (U.S. Navy)	SR-23	
DTD	Directorate of Technical Development	DTD 218	British Specifications
BS	British Standards Institute	BS2453	

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Sheet 5

2. (cont'd)

SPECIFICATIONS GROUP II

Specification	Origin	Typical Number	Remarks
SAE(AMS)	Society of Automotive Engineers	AMS 5070	AMS Aeronautical Material Specifications
NAS	National Aircraft Standards Committee	NAS 496	
ASTM	American Society for Testing Materials	B3-53	
CSA	Canadian Standards Association	B24.1-1952	
ASA	American Standard Association	A37.16-1948	

SPECIFICATIONS GROUP III

Avrocan	Avro Aircraft Company	M-1-12 E-400	Company Specification
Commercial	Example - U.S. Aluminum Alloy Manufacturers	7075-T6	Commercial Specification
Proprietary	Example - Dunlop Tire & Rubber Company	Dunlop 1084	Adhesive

2. (cont'd)

DESIGN STANDARDS GROUP I

Standard	Origin	Typical Number	Remarks
ABC	American, British and Canadian Air Standardization Co-ordinating Committee	Air Std. 17/18	Standardization agreement between RCAF, RAF, USAF & USN. Used when specified by contract
Stanag	North Atlantic Treaty Organization	Stanag No 3160	Standardization agreement NATO countries. Used when specified by contract
MIL-STD	Depts. of Interest of the U.S. Navy, Army & Air Force	MIL-STD-103	Military Standard practice
MS		MS 33540	Military Design Standard
JAN-STD	U.S. Army and U.S. Navy	JAN-STD-1	Being converted to MIL-STDs, very few exist
AND	USAF and US Navy (Previously U.S. Army-Navy)	AND 10050	

DESIGN STANDARDS GROUP II

NAS	National Aircraft Standard Committees	NAS 466	
SAE(ARP)	Society of Automotive Engineers	ARP143	Aeronautical Recommended Practices

DESIGN STANDARDS GROUP III

CS-D	Avro Aircraft Company	CS-D-12	Company Standard
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2. (cont'd)

STANDARD PARTS GROUP I

Part	Origin	Typical Number	Remarks
MS	Committees of Interest of the U.S. Army, Navy and Air Force	MS 9024	Military Standard
AN	Joint U.S. Air Force - Navy agreement (Formerly U.S. Army - Navy)	AN 960	Being gradually replaced by MS parts
JAN	Joint agreement by U.S. Army and Navy	JAN-R-19	
USAF	U.S. Air Force	945	

STANDARD PARTS GROUP II

AS	National Aircraft Standards	NAS 525	
SAE(AS)	Society of Automotive Engineers	AS452	Aircraft Standards

STANDARD PARTS GROUP III

CS-	Avro Aircraft Company	CS-B-1000	Company Standard
Commercial	Anti-Friction Bearing Manufacturers Association	AFBMA 200 Ball Bearing	
Proprietary	Huck Manufacturing Company	ALPHT6-2 Lockbolt	

2. APPROVAL STATUS OF SPECIFICATIONS DESIGN STANDARDS

AND STANDARD PARTS

GROUP I Specifications	
SPECIFICATION	STATUS
RCAF DND CGBS	Approved by CAP 479
FED MIL JAN AN USAF US ARMY	Approved by ARDCM 80-1 and CAP 479
ONAAAF	Approved by CAP 479
US NAVY BLAER	As approved by the USAF Spec. Index otherwise subject to specific RCAF approval.
DTD BS	Approved by CAP 479
GROUP II Specifications	
SAE (AMS) NAS	Those listed in ANA Bulletin #147 may be used without further or prior approval. However, satisfactory operation of equipment manufactured to these specifications is the responsibility of Avro. Those not listed require RCAF approval.
ASTM CSA ASA	Use requires RCAF Approval (ANA Bulletin #143). Approved by CAP 479 Use requires RCAF Approval (ANA Bulletin #143).
GROUP III Specifications	
Avrocan Commercial Proprietary	Only issued with RCAF Approval. May be used with - RCAF Approval.

2. (cont'd)

GROUP I	
Design Standards	
STANDARD	STATUS
ABC STANAGS	Approved by CAP 479. Mandatory only when specified in contract.
MIL-STD- MS JAN-STD AND	Approved by ARDCM 80-1
GROUP II	
Design Standards	
NAS	Those listed in ANA Bulletin #147 may be used without further or prior approval. However, satisfactory operation of equipment manufactured to these design standards is the responsibility of Avro. Those not listed require RCAF approval. (ANA Bulletin #143)
SAE (ARD)	Require RCAF Approval.
GROUP III	
Design Standards	
CS-D-	May be used with RCAF Approval (ANA Bulletin #143)
GROUP I	
STANDARD PARTS	
STANDARD	STATUS
MS AN JAN USAF	Approved by ARDCM 80-1
GROUP II	
Standard Parts	
NAS	Those listed in ANA Bulletin #147 may be used without further or prior approval. However, satisfactory operation of equipment manufactured to these standards is the responsibility of Avro. Those not listed require RCAF approval. (ANA Bulletin #143).
SAE (AS)	Require RCAF Approval.
GROUP III	
Standard Parts	
CS COMMERCIAL PROPRIETARY	Require RCAF Approval (ANA Bulletin #143) for use.

AVRO AIRCRAFT LIMITED

STANDARDS REPORT NO. 8

TITLE:

INDEX OF

ARROW

PROCESS STANDARDS ✓

COMPILED BY: SKA

APPROVED: SKClosson

Issue 1

Sept. 27, 1957

AVRO AIRCRAFT LIMITED
AIRCRAFT ENGINEERING DIVISION

Gen/Std8/8
Sheet 1

TITLE:

INDEX
OF
PROCESS STANDARDS

The following is an index of Avro Aircraft Limited process standards which are applicable to the ARROW aircraft.

The latest issue of any process standard will normally be used. Issues listed in the following index are those in current use at the date of issue of this index.

PROCESS STANDARDS

NUMBER	ISSUE	SUBJECT
*P.S.5	May 24 1955	Torquing of Bolts and Fluid Fittings
P.S.6	July 24 1957	Swaging of Cable Terminals
P.S.7	May 6 1957	Corrosion Protection of Magnesium Alloys
P.S.8	April 30 1957	Treatment of Scratches in Clad Aluminum Alloy Sheet
*P.S.10	June 4 1957	Riveting
P.S.13	May 15 1957	The Care, Working and Finishing of Methyl Methacrylate Plastics
P.S.14	April 30 1957	The Anodizing and Dyeing of Aluminum Alloy Components
P.S.15	May 15 1957	Chemical Process for the Surface Treatment of Aluminum & Aluminum Alloys (Alodine 1200 & Alodine 1000)
P.S.19	June 26 1957	Fabrication of Tubing for Aircraft Services
P.S.20	June 4 1957	Pressurization Sealing of Fuselage
*P.S.22	Oct. 1 1956	Installation of Duct and Hose Clamps
*P.S.24	July 26 1954	Metal Spraying
P.S.25	July 24 1957	Cadmium Plating
P.S.29	Dec. 21 1956	Copper Plating
*P.S.31	May 31 1957	The Mixing and Control of Thiokol-Based Synthetic Rubber Sealing Compounds
*P.S.32	June 3 1957	Cements and Adhesives
*P.S.35	Nov. 24 1955	Aircraft Flexible Hose and Hose Assemblies - The Testing and Handling of

PROCESS STANDARDS

NUMBER	ISSUE	SUBJECT
P.S.69	Jan. 14 1955	Assembly of Ferrules to Elastic Cord
P.S.71	Feb. 9 1955	Unichrome Black Dip Process for Cadmium Plated Parts
*P.S.72	Mar. 18 1955	Removal of Corrosion Caused by Spilling of Battery Acid
*P.S.77	June 4 1957	Electrical Wiring Practice for C-105 Aircraft
*P.S.78	Oct. 15 1956	Cementing Metal to Metal Structure
*P.S.79	May 27 1957	Sintered Metal Powder Bearings and Materials-Machining, Oil Impregnation and Installation
P.S.80	Dec. 17 1956	Scotchcals - Application of

AVRO AIRCRAFT LIMITED

STANDARDS REPORT NO. 9

TITLE:

INDEX OF

ARROW

PROCESS SPECIFICATIONS ✓

COMPILED BY: MA

APPROVED: JR Closson

Issue 1

Sept. 27, 1957

AVRO AIRCRAFT LIMITED
AIRCRAFT ENGINEERING DIVISION

Gen/StdS/9
Sheet 1

TITLE:

INDEX
OF
PROCESS SPECIFICATIONS

The following is an index of Avro Aircraft Limited Process Specifications which are applicable to the ARROW aircraft. Process specifications will usually be referred to on aircraft drawings when applicable.

NUMBER	ISSUE	SUBJECT
*P-1-1	2	Protection of Magnesium Alloys Against Corrosion (Hot Chromate Treatment)
P-2-2	2	Heat Treatment of Steel
P-3-4	3	The Anodizing and Dyeing of Aluminum Alloy Components
P-4-1	4 am -1	Castings - Classification, Inspection and Testing of
*P-5-3	1	Copper Plating
*P-5-5	2	Electro-Plating Silver
*P-6-1	1	Resistance Welding - Spot and Seam Cancelled-Replaced by MIL-W-6860 & MIL-W-6858
*P-6-2	1 am -1	Silver Brazing
*P-6-3	1	Welding-Automatic Inert Gas
*P-6-4	1 am -2	Fusion Welding and Brazing
*P-7-1	2 am -1	Chemical Treatment of Steel Surfaces (Du-Lite Process)
*P-7-2	1	Chemical Process for the Surface Treatment of Aluminum and Aluminum Alloys (Alodine Process)
*P-7-3	Prelim Iss. A	Phosphate Protective Coating for Iron and Steel (Manganese Phosphate Treatment)
*P-7-4	1	Solid Film Dry Lubricant Coatings
*P-8-1	2 am -2	The Cementing of Metal to Metal Joints in Airframe Structural Components
*P-8-2	1	The Sealing of Non-Structural Joints by Means of Metal Adhesives

NUMBER	ISSUE	SUBJECT
*P-8-3	Prelim Iss. B am -1	The Fabrication of Aluminum Honeycomb Sandwich for Airframe Structural Components (Temperature Range from -65°F to 250°F)
*P-8-4	Prelim Iss. A am -1	The Fabrication of Aluminum Honeycomb Sandwich for Airframe Structural Components (Temperature Range -65°F to 160°F)
*P-9-1	1	The Cold Forming of Heat Treatable Aluminum Alloys
*P-9-2	2	The Processing of Avrocan M-1-7 (ZE41) Magnesium Alloy Sheet in the H24 and H26 Conditions
*P-9-4	3	The Processing of Titanium and Titanium Alloys
P-9-5	3	The Processing of 7075 (75S) Aluminum Alloy Sheet and Extrusions
*P-10-1	1	Special Finish for Exterior Metal Surfaces of Aircraft (Satin Finish)
*P-10-2	1	Reconditioning Aircraft Metal Exterior Surfaces
*P-10-3	Prelim Iss. A	Application of Epoxy Base Primer and Enamel
*P-11-2	1	Dimpling
*P-12-1	1 am -1	The Provision and Handling of Test Pieces to Cover the Heat Treatment of Ferrous and Non-Ferrous Metals.
*P-13-1	1	The Fabrication of Heat Resisting Glass Fabric Laminates for Aircraft Components
*P-13-3	Prelim Iss. A	Application of Gap Filling Compound (M-13-2)

PROCESS SPECIFICATIONS

NUMBER	ISSUE	SUBJECT
*P-14-1	3 am -1	The Processing of EN30B and SAE4340 Steels at High Strength Levels
P-14-2	1 am -2	The Processing of Hand and Die Forgings of Aluminum Alloy to Avrocan M-2-5 (X7079)
*P-14-3	Prelim Iss. 1	The Processing of 17-7 PH Stainless Steel
*P-14-4	Prelim Iss. A	Processing of Inconel "X"

* These Process Specifications are under Review and Will be Amended at an early date.

