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Toronto, Ontario M9W 6N9  
Tel.: 416.734.3300  
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Toll Free: 1.877.682.8772

[www.tssa.org](http://www.tssa.org)

March 25, 2020

SCOTT ISLIP  
ROUND ENGINEERING INC  
10 SEGWUN RD  
WATERDOWN ON L8B 0K6  
CA

Service Request Type: BPV-Fitting Registration  
Service Request No.: 2781392  
Your Reference No.: R-1195  
Registered to: CIRCOR AEROSPACE INC

Dear SCOTT ISLIP,

Technical Standards and Safety Authority (TSSA) is pleased to inform you that your submission has been reviewed and registered as follows:

CRN: **0C22286.5**

Main Design No.: RELIEF VAVLES SERIES 5100 - SEE SCOPE OF REGISTRATION (2PGS)

Expiry Date: 25-Mar-2030

Please be advised that a valid quality control system must be maintained for the fitting registration to remain valid until the expiry date.

Notes:

1. This registration is for series 5100 relief valves per ASME B31.1/B31.3.
2. Sizes range from 3/8" to 1 1/4".
3. Materials include ASTM A479 316, A582-303/A473-303 and B16 UNS C36000.
4. These valves not to be used as primary protection safety relief valves.

A stamped copy of the approved registration and invoice for engineering services will be mailed to you shortly. Should you have any questions or require further assistance, however, please contact a Customer Service Advisor at 1.877.682.TSSA (8772) or e-mail [customerservices@tssa.org](mailto:customerservices@tssa.org). We will be happy to assist you. When contacting TSSA regarding this file, please refer to the Service Request number provided above.

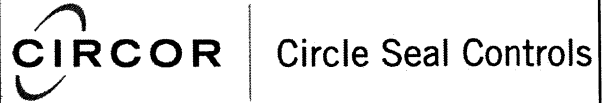
Yours truly,

Alan Wu P. Eng.  
Mechanical Engineer, BPV  
Tel. : 416-734-3443  
Fax : 416-231-6183  
Email : [awu@tssa.org](mailto:awu@tssa.org)



Technical Standards and Safety Authority  
 345 Carlingview Drive  
 Toronto, Ontario M9W 6N9  
 www.tssa.org

Show facsimile of manufacturer's logo or trademark, as it will appear on the fitting, in the space below



## STATUTORY DECLARATION Registration of Fittings

I, RANDALL RALEY, PRODUCT MANAGER  
(Name and Position, e.g. President, Plant Manager, Chief Engineer)

of CIRCOR AEROSPACE, INC.  
(Name of Manufacturer)

Located at 2301 Wardlow Circle, Corona, California, 92880, USA 951-270-6462  
(Plant Address) (Telephone No.) (Fax No.)

do solemnly declare that the fittings listed hereunder, which are subject to the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, comply with all of the requirements of ASME B31.1, ASME B31.3

(Title of recognized North American Standard)

which specifies the dimensions, materials of construction, pressure/temperature ratings, identification marking the fittings and service;

or are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with \_\_\_\_\_ as supported by the attached data which identifies the dimensions, material of construction, pressure/temperature ratings and the basis for such ratings, the marking of the fitting for identification and service.

I further declare that the manufacture of these fittings is controlled by a quality system meeting the requirements of ISO 9001 which has been verified by the following authority, SAI GLOBAL

The items covered by this declaration, for which I seek registration, are category C - Inline Relief Valves type fittings. In support of this application, the following information and/or test data are attached as follows:

SCOPE OF CRN REGISTRATION, REPORTS, DRAWINGS, CALCULATIONS  
(drawings, calculations, test reports, etc.)

Declared before me at \_\_\_\_\_ in the \_\_\_\_\_ of \_\_\_\_\_  
 the \_\_\_\_\_ day of \_\_\_\_\_ AD 20\_\_\_\_\_.

Commissioner for Oaths:

\_\_\_\_\_  
(Printed name)  
See attached @ 2/7/2020 Randall Raley  
(Signature) (Signature of Declarer)

### FOR OFFICE USE ONLY

To the best of my knowledge and belief, the application meets the requirements of the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, and CSA Standard B51 and is accepted for registration in Category C.

CRN: 0C22286.5  
 Registered by: Alan Wu  
 Dated: Mar 25, 2020

Technical Standards and Safety Authority
Boilers and Pressure Vessels Safety Program

REGISTERED

C.R.N.: 0C22286.5

Signed: Alan Wu

Date: March 25, 2020.

NOTE: This registration expires on: Mar 25, 2030

*\*Information provided in this application is releasable under the Freedom of Information and Privacy Protection Act and may be disclosed upon request*

**CALIFORNIA JURAT WITH AFFIANT STATEMENT**

**GOVERNMENT CODE § 8202**

- See Attached Document (Notary to cross out lines 1-6 below)
- See Statement Below (Lines 1-6 to be completed only by document signer[s], not Notary)

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

4 \_\_\_\_\_

5 \_\_\_\_\_

6 \_\_\_\_\_

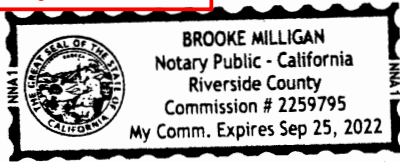
Signature of Document Signer No. 1                      Signature of Document Signer No. 2 (if any)

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California  
 County of Riverside

Subscribed and sworn to (or affirmed) before me  
 on this 7<sup>th</sup> day of February, 2020,  
 by Randall Raley  
 (1) \_\_\_\_\_  
 (and (2) \_\_\_\_\_),  
 Name(s) of Signer(s)

**THIS IS PART OF CRN**  
 OC22286.5  
 Technical Standards and Safety Authority  
 Boilers and Pressure Vessels Safety  
 Program



proved to me on the basis of satisfactory evidence  
 to be the person(s) who appeared before me.  
 Signature Brooke Milligan  
 Signature of Notary Public

Seal  
 Place Notary Seal Above

**OPTIONAL**

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

**Description of Attached Document**

Title or Type of Document: STATUTORY DECLARATION Document Date: NO DATE  
 Number of Pages: 1 Signer(s) Other Than Named Above: NO OTHER SIGNERS

**SCOPE OF CRN REGISTRATION**

Product Description	Model	Design Code	Valve Type	End Connection	Size	Material Specifications (Note 3)	MAWP at MAWT (Note 1)	Report Number	
Relief Valves (Note 2)	Series 5100	ASME B31.1, ASME B31.3	Pop-off Type M	NPT	1/8"	Type 316 SS	2400 psig at 400°F	R-1195	
						Type 303 SS	2400 psig at 400°F		
						Brass	2400 psig at 350°F		
					1/4"	Type 316 SS	2400 psig at 400°F		
						Type 303 SS	2400 psig at 400°F		
						Brass	2400 psig at 350°F		
					3/8"	Type 316 SS	2400 psig at 400°F		
						Type 303 SS	2400 psig at 400°F		
						Brass	2400 psig at 350°F		
					1/2"	Type 316 SS	2400 psig at 400°F		
						Type 303 SS	2400 psig at 400°F		
						Brass	1700 psig at 350°F		
			3/4"	Type 316 SS	2400 psig at 400°F				
				Type 303 SS	2400 psig at 400°F				
				Brass	1600 psig at 350°F				
			1"	Type 316 SS	2400 psig at 400°F				
				Type 303 SS	2400 psig at 400°F				
				Brass	2400 psig at 350°F				
			1-1/4"	Type 316 SS	1200 psig at 400°F				
				Type 303 SS	1200 psig at 400°F				
				Brass	1200 psig at 350°F				
			In-Line Type MP	NPT		1/8"	Type 316 SS		2400 psig at 400°F
							Type 303 SS		2400 psig at 400°F
							Brass		1400 psig at 350°F
1/4"	Type 316 SS	2400 psig at 400°F							
	Type 303 SS	2400 psig at 400°F							
	Brass	1400 psig at 350°F							

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 OC22286.5  
 Technical Standards and Safety Authority  
 Boilers and Pressure Vessels Safety  
 Program

**SCOPE OF CRN REGISTRATION CONTINUED**

Product Description	Model	Design Code	Valve Type	End Connection	Size	Material Specifications (Note 3)	MAWP at MAWT (Note 1)	Report Number
Relief Valves (Note 2)	Series 5100	ASME B31.1, ASME B31.3	In-Line Type MP	NPT	3/8"	Type 316 SS	2400 psig at 400°F	R-1195
						Type 303 SS	2400 psig at 400°F	
						Brass	1400 psig at 350°F	
					1/2"	Type 316 SS	2400 psig at 400°F	
						Type 303 SS	1800 psig at 400°F	
						Brass	1000 psig at 350°F	
					3/4"	Type 316 SS	2200 psig at 400°F	
						Type 303 SS	1600 psig at 400°F	
						Brass	900 psig at 350°F	
					1"	Type 316 SS	2200 psig at 400°F	
						Type 303 SS	1600 psig at 400°F	
						Brass	900 psig at 350°F	
					1-1/4"	Type 316 SS	1200 psig at 400°F	
						Type 303 SS	1200 psig at 400°F	
						Brass	1000 psig at 350°F	

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**Note 1:** MAWP = Maximum Allowable Working Pressure, MAWT = Maximum Allowable Working Temperature.

**Note 2:** Valves not to be used as primary protection safety relief valves.

**Note 3:** Type 316 SS = Stainless Steel ASTM A479-316  
 Type 303 SS = Stainless Steel A582-303 meeting the requirements specified in ASTM A473.  
 Brass = Brass ASTM B16 UNS C36000. In accordance with ASME B31.1 Table A-6 Note (8) Materials shall be tested to determine the presence of residual stresses that might result in failure of individual parts due to stress corrosion cracking. Tests shall be conducted in accordance with ASTM B154 or ASTM B858. The test frequency shall be as specified in ASTM B249.

**Note 4:** The pressure-temperature ratings shown are the maximum CRN pressure-temperature ratings. In all cases the pressure-temperature ratings may be limited by the seat and seal materials. Please consult Circle Aerospace, Inc.

**Note 5:** For low temperature operation the products shall conform to the rules of the applicable codes under which they are used.

**Note 6:** In accordance with ASME B31.1 para. 123.1.2(D) when this product is manufactured from a ASME B31.1 unlisted material and used under the ASME B31.1 code the facility owner must accept the use of the following non listed materials.

- Stainless Steel ASTM A582-303 meeting the requirements specified in ASTM A473.