

1. Approving Civil Aviation Authority / Country		2.			3. Form Tracking No.		
Transport Canada		AUTHORIZED RELEASE CERTIFICATE Form One			W106399		
4. Organization Name and Address		Aviatechnik Corporation 710 Gana Court Mississauga, ON, Canada, L5S 1P2			5. Work Order / Contract / Invoice		
		Tel: 905-890-7778 www.aviatechnikcorp.com			R657930		
6. Item	7. Description	8. Part No.	9. Qty.	10. Serial / Batch No.	11. Status / Work		
1	NLG Shock Strut Equipped	190-70745-613	1	00146	Repaired		
12. Remarks:							
* Repaired in accordance with CMM # 32-21-02, Rev # 20 dated 30 November 2024.							
* Full details of work performed in work order W106399.							
* For the replacement parts refer to Teardown Report.							
* Service Bulletin 190-32-0060 R1 (190-70453-32-06 R1) incorporated.							
* CSN-22518; CSO-3861.							
* Overhauled on 26 January 2017.							
13a. Certifies that the items identified above were manufactured in conformity to:		14a.					
☒ Approved design data and are in condition for safe operation.		☒ CAR 571.10 Maintenance Release.					
☐ Non approved design data specified in block 12.		☐ Other regulations specified in block 12.					
13b. Signature		13c. Approved Organization Number		14b. Signature			
13d. Name		13e. Date (dd/mm/yyyy)		14c. Approved Organization Number			
				50-12			
				14e. Date (dd/mm/yyyy)			
				04/Jan/2025			
(Previously form 24-0078)							
Important: See notes							
Installer Responsibilities							
This certificate does not constitute authority to install.							
Installer working in accordance with the national regulations of a country other than that specified in block 1, must ensure that their regulations recognize certifications from the country specified.							
Statements in blocks 13a and 14a do not constitute installation certification. In all cases, the technical record must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.							

LANDING GEAR LOG CARD

PART NO: 190-70745-613
SERIAL NO: 00146

UNIT: Shock Strut Assy NLG
AUTHORIZED OVERHAUL LIFE: 25000 cyc/12 years

AIRCRAFT INSTALLATION RECORDS

Aircraft Reg./Con. No.	FITTED TO AIRCRAFT				REMOVED FROM AIRCRAFT				REASON FOR REMOVAL
	DATE	C.S.O.	C.S.N.	A/F CYCLES	DATE	C.S.O.	C.S.N.	A/F CYCLES	
		3,861	22,518						

PRIMARY MEMBER RECORDS

DESCRIPTION	PART NO.	SERIAL NO.	FITTED TO GEAR			REMOVED FROM GEAR			REASON FOR REMOVAL
			DATE	C.S.O.	C.S.N.	DATE	C.S.O.	C.S.N.	
Shock Strut Assy	190-70453-613	00146	04/Jan/2025	3,861	22,518				
Pintle Pin, LH	190-70495-001	3115563	04/Jan/2025	0	0				
Pintle Pin, RH	190-70490-001	1150974/004	04/Jan/2025	3,861	22,518				
Pin, RA ATT	170-70496-003	1153921/016	04/Jan/2025	3,861	22,518				
Pin, Drag Brace Attach	190-70497-001	1160334/009	04/Jan/2025	3,861	22,518				
Cylinder Steering	170-70480-001	1105876/001	04/Jan/2025	3,861	21,071				
Cylinder Steering	170-70480-003	1309806/006	04/Jan/2025	3,861	12,814				
TQ Link, UPR Assy	190-70468-403 (190-70469-005)	1170597/001 (AP0421)	04/Jan/2025	3,861	22,617				
TQ Link, LWR Assy	190-70466-401 (190-70482-003)	1100130/001 (AP0112)	04/Jan/2025	3,861	21,426				
Tube, Sliding	190-70464-001 (190-70465-401)	1173054/001	04/Jan/2025	3,861	20,194				
Wheel Axle	190-70460-311	1581193/002	04/Jan/2025	3,861	3,861				
Rack	170-70476-901	8105S1/003	04/Jan/2025	3,861	22,518				
Steering Cuff	190-70478-001 (190-70540-401)	1141983/002 (1171891/001)	04/Jan/2025	3,861	22,518				

PRIMARY MEMBER RECORDS

[illegible]

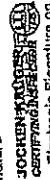
NOTES:

1. For ultimate lives and/or inspection requirements, refer to Aircraft MRBR and to the appropriate Embraer/Liebherr Service Bulletin.
2. It is the Operator's responsibility to ensure these records are fully and accurately maintained.
3. Lives of primary members shall be maintained. Failure to comply may result in premature scrap.
4. Should a primary member be removed from the unit it must be suitably tagged to indicate consumed life.
5. If the Part No. is changed a new Log Card must be completed, transferring relevant information from the previous Card.
6. The Log Card was created refer to client's provided documents.

W106399

W1000

W106399

1 Country Bundesrepublik Deutschland Federal Republic of Germany		2 Freigabebescheinigung - Zertifikat CERTIFICATE OF CONFORMITY CERTIFICAT DE CONFORMITÉ		3 Certificate Ref.No.  CoC240000451068							
4 Organisation LIEBHERR-AEROSPACE LINDENBERG GmbH • Pfandensstr. 50-52 • 88161 Lindenberg • Germany • Phone: +49 (0) (8381) 46-0 • Fax: +49 (0) (8381) 46 4377		5 Work Order / Contract / Invoice TR0060232 / SP0303014 Pos. 0080									
6 Item 1		7 Description, Benennung PIN PINTLE LEFT		8 Part No., Teilenummer 190-70495-001							
9 Quantity 1		10 Serial No. 3115563									
11 Remarks Purchase Order Number: We confirm that the attached supplier Authorized Release Certificate Ref. No.: ELB 0022072/23 is a "TRUE COPY" of the certificate originally supplied to Liebherr-Aerospace Lindenberg GmbH <table border="1"><tr><td>Item</td><td>DMF</td><td>Orderpos.</td></tr><tr><td>1</td><td>N/A</td><td>-</td></tr></table> IDENTCODE COMPANY CERTIFICATE i.a.w. EN 10204 / 2.1						Item	DMF	Orderpos.	1	N/A	-
Item	DMF	Orderpos.									
1	N/A	-									
12. Wir bestätigen, daß die Liefergegenstände nach den gültigen Unterlagen (wie Zeichnungen, Normen, Spezifikationen, genehmigte Abweichungen) gefertigt und geprüft wurden und die Prüfergebnisse diesen Unterlagen entsprechen. This is to certify that the items of delivery have been manufactured and inspected according to effective documents (drawings, standards, specifications, approved deviations) and that inspection results are in conformity with these documents.											
13 Signature  Jochen Krueger		14 Reference		17							
15 Name of authorized QA-Representative Jochen Krueger		16 Date (d/m/y) / 12 Nov 2024		18							
				19							
				20							
				21							

Nr. 1013-0A-09/00



C&L Aerospace

Bangor

(Main Office)

40 Wyoming Ave
Bangor, ME 04401
Tel: +1 207 217 0050
Fax: +1 207 945 0992

Australia

ABN 14 949 098 590

5/37 Wendorah St.
Stafford QLD 4053
Tel: +61 3354 8100
Fax: +61 3353 8191

United Kingdom

Headcorn Road
Sutton Valence, ME17 3EL
Great Britain
Tel: +44 (0) 1622 960 117

Repair Order

Order #: R657930

Account Number:

Date Printed: 29 Aug 2024

Time: 9:50:39 AM

No. of Items: 1 **W106399**

Page: 1

Contact: Robert Howard

Email: Repairs@CLA.Aero

To:

ATTN: NATALIYA NECHYPORENKO
AVIATECHNIK CORPORATION
710 GANA COURT
MISSISSAUGA, ON L5S1P2
Canada
PHONE: 905 890 7778

Ship To:

C & L AEROSPACE
40 WYOMING AVE
BANGOR, ME 04401
USA

Ship Via: TBA

Ship Via Acc:

Terms: NET 30

RO Date: 5/14/2024

Warranty: No

All items subject to our inspection and acceptance

Item	Part Number/Description	CD	Qty	UOM	Serial	Return Date	Line Amt
1	²⁰⁷⁴⁵ 190-70450-605 NLG SHOCK STRUT SO #: Parts: \$.00 Labor: \$5,000.00 Misc: \$.00 Instructions: PLEASE INSPECT AND QUOTE TO TEST/INSPECT/RECERTIFY *PLEASE PROVIDE QUOTE WITHIN TWO WEEKS AFTER PART ARRIVES TO SHOP *PLEASE PROVIDE ONE QUOTE UTILIZING ALL NEW PARTS, AND A SECOND QUOTE PROVIDING AS MANY PMA, EPA AND SERVICABLE PARTS AS POSSIBLE *INDIVIDUAL PARTS LIST AND PRICING WITH QUOTE IS REQUIRED **TRIPLE RELEASE (FAA, EASA, TCCA) CERTIFICATION REQUIRED(SEPARATE 8130, FORM ONE, AND TCCA CERTS TOGETHER ARE ALSO ACCEPTABLE.) *PLEASE ALSO INCLUDE CAA FORM 1 AS SEPERATE CERTIFICATION * ORIGINAL TEARDOWN REPORT REQUIRED. * DER REPAIRS OR DAR MUST BE DISCLOSED AT	AR	1.00	EA	00146	25 Oct 2024	\$5,000.00

	See last page for totals
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Authorized Signature: Robert Howard

Standard Terms & Conditions:

- Please ensure that the Repair Order is read carefully as failure to comply with the requirements will result in the Supplier being responsible for any charges incurred for the return of the goods to the Suppliers premises.
- All goods purchased through this Repair Order are subject to a quality inspection to be carried out by C&L Aerospace
- C&L Aerospace reserves the right to return any goods that do not meet the requirements of the purchase order or are faulty in any way up to 30 days after receipt of consignment.
- This repair order is only valid when accompanied by an authorised signature.
- For Exchange transactions, the Seller agrees to, when applicable:
 - A part known to have been subjected to conditions of extreme stress, heat, or environment are so identified.
 - All Airworthiness Directives (AD's) that are represented as having been accomplished are documented.
 - Items identified as OH, Repaired, Inspected, or Modified have the appropriate signed and dated documentation attached



C&L Aerospace

Bangor
(Main Office)

40 Wyoming Ave
Bangor, ME 04401
Tel: +1 207 217 6050
Fax: +1 207 945 0992

Australia

ABN 14 849 096 590
1/37 Wendorah St
Stafford QLD 4053
Tel: +61 3353 0100
Fax: +61 3353 0111

United Kingdom

Headcorn Road
Sutton Valence, ME17 3EL
Great Britain
Tel: +44 (0) 1622 950 117

Repair Order

Order #: R657930

Account Number:

Date Printed: 29 Aug 2024

Time: 9:50:40 AM

No. of Items: 1

Page: 2 **W106399**

Contact: Robert Howard

Email: Repairs@CLA.Aero

To:

ATTN: NATALIYA NECHYPORENKO
AVIATECHNIK CORPORATION
710 GANA COURT
MISSISSAUGA, ON L5S1P2
Canada
PHONE: 905 890 7778

Ship To:

C & L AEROSPACE
40 WYOMING AVE
BANGOR, ME 04401
USA

Ship Via: TBA

RO Date: 5/14/2024

Ship Via Acc:

Warranty: No

Terms: NET 30

All items subject to our inspection and acceptance

Item	Part Number/Description	CD	Qty	UOM	Serial	Return Date	Line Amt
	THE TIME OF QUOTING. * MANUAL REFERENCE & REVISION # MUST BE REFERENCED IN CERTIFICATION. * CURRENT REVISION OF THE APPLICABLE CMM MUST BE USED UNLESS OTHERWISE APPROVED BY C&L AEROSPACE AND ANY COSTS TO BRING A UNIT IN LINE WITH THE CURRENT REV. AFTER RELEASE WILL BE FOR THE SHOP, INCLUDING, AND NOT LIMITED TO FREIGHT, PARTS AND LABOR. * SHIPPER RESPONSIBLE FOR DAMAGE TO POORLY PACKAGED ITEMS. * SHIPPER RESPONSIBLE FOR PROPER CUSTOMS PAPERWORK FOR INTERNATIONAL SHIPMENTS. * WORK PERFORMED MUST BE DONE IAW CURRENT OEM TECH DATA OR FAA APPROVED DATA. * PART NUMBER MUST BE IDENTIFIED ON PART IF NOT VISIBLE. * SERIAL NUMBER MUST BE IDENTIFIED ON PART IF NOT VISIBLE AND ASSIGNED IF PART DOES NOT ALREADY HAVE A S/N. * PLEASE DO NOT INCLUDE ANY INVOICES OR PAPERWORK THAT INCLUDES PRICING IN THE RETURN SHIPMENT						

Parts Total: \$.00

Labor Total: \$5,000.00

Misc Total: \$.00

Total: \$5,000.00

US Dollars

Authorized Signature: Robert Howard

Standard Terms & Conditions:

- Please ensure that the Repair Order is read carefully as failure to comply with the requirements will result in the Supplier being responsible for any charges incurred for the return of the goods to the Suppliers premises.
- All goods purchased through this Repair Order are subject to a quality inspection to be carried out by C&L Aerospace
- C&L Aerospace reserves the right to return any goods that do not meet the requirements of the purchase order or are faulty in any way up to 30 days after receipt of consignment.
- This repair order is only valid when accompanied by an authorised signature.
- For Exchange transactions, the Seller agrees to, when applicable:
 - A part known to have been subjected to conditions of extreme stress, heat, or environment are so identified.
 - All Airworthiness Directives (AD's) that are represented as having been accomplished are documented.
 - Items identified as OH, Repaired, Inspected, or Modified have the appropriate signed and dated documentation attached

LIMITED LIABILITY COMPANY**«AIRCOMPANY «IKAR»**

Karagandinskaya st. 58/1, building 4, office 9,
Orenburg region, Orenburg, 460036, Russia
Correspondence address:
Karagandinskaya st. 58/1, building 4, office 9,
Orenburg region, Orenburg, 460036, Russia
phone +7 (3532) 48 79 99

W106399

Date: 20 September 2022

Landing Gear Status / Statement

To Whom It May Concern:

Aircraft Embraer 190-100LR MSN 19000259 reg. VP-BZJ, has been operated by LLC «Aircompany «IKAR» during the period from 17 August 2018 (TAH 20038,67 and TAC 12382) to 15 September 2022 (TAH 27140:53 and TAC 16241) had below listed Landing Gear assemblies installed:

Description	Type/Part No.	Serial No.	TSN	CSN
Nose Landing Gear	190-70450-403	00146	29076:20	22518
LH Main Landing Gear	4259A0000-02	00350	26310:13	20194
RH Main Landing Gear	4260A0000-02	05345	26273:13	20185

I hereby certify that the above stated Landing Gear Assemblies and all its major components as delivered to LLC «Aircompany «IKAR», and during the period stated above, were not removed and remain fitted to the Airframe MSN: 19000259 at re-delivery.

Authorised Airline Representative

Signature: _____

Name: Aleksandr Trushliakov

Position: E190 systems lead engineer

Date: 20-September-2022

NOSE LANDING GEAR LLP STATUS

MSN: 19000259
Registration: VP-BZJ
TSN: 27140:53
CSN: 16,241

Date: 14-Sep-2022

LIMITED LIABILITY COMPANY
«AIRCOMPANY «IKAR»
Karagandinskaya st. 58/1, building 4, office 9,
Orenburg region, Orenburg, 460036, Russia
Correspondence address:
Karagandinskaya st. 58/1, building 4, office 9,
Orenburg region, Orenburg, 460036, Russia
phone +7 (3532) 48 79 99

NLG DATA		LAST SHOP VISIT		NLG WHEN INSTALLED		NLG CURRENT	
INSTALLATION DATE	25/02/2017	CSN:	18,657	CSN:	18,657	CSN:	22,518
NLG PIN	190-70450-403	CSO:	0	CSO:	0	CSO:	3,861
NLG S/N	146	DATE:	26/01/2017	TSN:	21974:00	CSI:	3,861
		TSN:	-	A/C FH:	-	TSN:	-
				A/C FC:	12,380		

Nose Landing Gear - Shock Strut Assy		190-70453-605	00146	18,657	3,861	22,518			
NOMENCLATURE	PART NUMBER	SERIAL NUMBER	CYCLES AT INSTALLATION	CSI	CSN CURRENT	LIFE LIMIT	REMAIN	Aircraft CSN at inst	
MAIN FITTING	190-70500-405	1171841/001	18,657	3,861	22,518 ✓	56000	33,482	12,380	
SLIDING TUBE	190-70464-001	1173054/001	16,333	3,861	20,194 ✓	56000	35,806	12,380	
AXLE WHEEL	190-70460-311	1581193/002	0	3,861	3,861 ✓	56000	52,139	12,380	
CAM LOWER	190-70470-301	1597639/001	0	3,861	3,861 ✓	56000	52,139	12,380	
CAM UPPER	190-70471-001	1150972/006	18,657	3,861	22,518 ✓	56000	33,482	12,380	
PIN BATT	190-70497-001	1160334/009	18,657	3,861	22,518 ✓	56000	33,482	12,380	
TORQUE LINK UPPER	190-70469-005	AP0421	18,756	3,861	22,617 ✓	56000	33,383	12,380	
TORQUE LINK LOWER	190-70482-003	AP0112	17,565	3,861	21,426 ✓	56000	34,574	12,380	
RACK	170-70478-901	8105S1/003	18,657	3,861	22,518 ✓	56000	33,482	12,380	
CYLINDER STEERING	170-70480-001	1105876/001	17,210	3,861	21,071 ✓	82400	61,329	12,380	
CYLINDER STEERING	170-70480-003	1309806/006	8,953	3,861	12,814 ✓	82400	69,586	12,380	
PIN PINTLE LEFT	190-70495-001	1134174/017	18,657	3,861	22,518 ✓	56000	33,482	12,380	
PIN PINTLE RIGHT	190-70490-001	1150974/004	18,657	3,861	22,518 ✓	56000	33,482	12,380	
CUFF STEERING	190-70478-001	1141983/002	18,657	3,861	22,518 ✓	56000	33,482	12,380	
PINION	170-70475-901	PTC7947S3/016	18,657	3,861	22,518 ✓	56000	33,482	12,380	

Nose Landing Gear - Locking Stay Assy		190-70650-401	0065	17,345	3,861	21,206			
NOMENCLATURE	PART NUMBER	SERIAL NUMBER	CYCLES AT INSTALLATION	CSI	CSN CURRENT	LIFE LIMIT	REMAIN	Assy CSN at inst	
Stay, Locking Upper	170-70655-003	1154467/001	18,657	3,861	22,518	56000	33,482	12,380	
Stay, Locking Lower	190-70658-003	AP0184	17,345	3,861	21,206	56000	34,794	12,380	
Cardan	170-70667-001	1105102/010	17,345	3,861	21,206	56000	34,794	12,380	

Nose Landing Gear - Drag Brace Assy		190-70550-403	0295	16,333	3,861	20,194			
NOMENCLATURE	PART NUMBER	SERIAL NUMBER	CYCLES AT INSTALLATION	CSI	CSN CURRENT	LIFE LIMIT	REMAIN	Assy CSN at inst	
Brace Lower	190-70556-001	1200986/004	16,333	3,861	20,194	56000	35,806	12,380	
Brace Upper	190-70553-005	1209946/005	16,333	3,861	20,194	56000	35,806	12,380	
Axle Middle	190-70560-001	1182352/013	16,333	3,861	20,194	56000	35,806	12,380	
Pin Pintle	190-70555-001	1189174/017	16,333	3,861	20,194	56000	35,806	12,380	
Pin Pintle	190-70555-001	1189174/030	16,333	3,861	20,194	56000	35,806	12,380	

Authorised Airline Representative

Signature:
Name:
Position:
Date:

Aleksandr Trushnikov
E190 systems lead engineer
14 Sep 2022

**Subject: Non Accident / Incident Statement****Date: May 10th, 2017****To whom it may concern:****Model: E175****Aircraft Serial Number: 259****Aircraft Registration: N982TA****Manufacturer: EMBRAER****Total Time: 20037.40****Total Cycles: 12381**

This is to confirm that, the above referenced Aircraft and its associated components were operated by TACA since 30 March 2009 up to re-delivery to Nordic Aviation Capital. During that period of time, the above referenced equipment has not been involved in any accident (according to I. C. A. O. Annex 13 Paragraph B) or serious incident (according to I. C. A. O. Annex 13 Chapter 1).

This Aircraft has not been involved in any Major failure or fire, extreme stress or neither over temperature outside of normal operation nor any part fitted was obtained from any government or military source and they were not immersed in salt water during its operation with TACA Group.


Godofredo Ortiz
TACA International Airlines, S. A.
Quality Control Inspector

Copa AirlinesApril 25th 2017**LOG CARD MODIFICATION AUTORIZATION STATEMENT**

To whom it may concern:

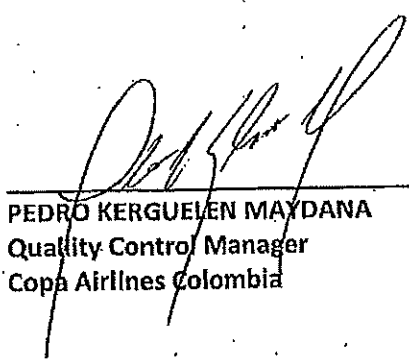
This Document grants the Avianca's Authorization to modify the incorrect data filled out in the Log Cards for Landing Gear assemblies on HK-4560 MSN 19000208. This Authorization is related to the installation and removal data included on NIS, document that endorsement all the information concerned to the Maintenance actions carried out during the Landing gear operation for Copa Airlines.

This Authorization covers following Landing Gear Major Assemblies Log Card:

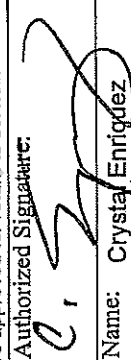
DESCRIPTION	PN	SN
NLG LOCKING STAY	190-70650-401	00249
NLG DRAG BRACE	190-70550-403	00295
LH MLG SHOCK STRUT	4259A0000-02	00350
LH MLG LOCKING STAY	190-70250-409	00469
LH MLG SIDE STAY	190-70200-401	00045
MLG LOCKING STAY	190-70250-409	00431
RH MLG SIDE STAY	190-70200-402	00045

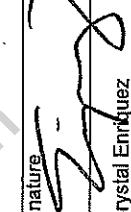
This Authorization applies only for the Major assemblies listed above; cannot be used for to change any other component data on some airplane that had been operated by Copa Airlines or Copa Airlines Colombia.

Best regards.



PEDRO KERGUELEN MAYDANA
Quality Control Manager
Copa Airlines Colombia

1. Approving Civil Aviation Authority / Country FAA / United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, Airworthiness Approval Tag		3. Form Tracking Number: 107318	
4. Organization Name and Address: HAWKER PACIFIC AEROSPACE Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352		5. Work Order/Contract/Invoice Number: 660010101 /		5. Work Order/Contract/Invoice Number:	
6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work
1	NLG SHOCK STRUT EQUIPPED	190-70450-403	1	00146	OVERHAULED
12. Remarks: Life Details: TSN: 21974:07 CSN: 18657.00 TSO: ZERO CSO: ZERO Y0007917 OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM CHAPTER 32-21-02 REV 15 DATED 29FEB2016. ACCOMPLISHED EMBRAER SB'S: 190-32-0032, 190-32-0050, 190-32-0051, 190-32-0052, 190-32-0057, 190-32-0058. COMPLIED WITH HPA REPAIR SPECIFICATION: RS-ENG-243 REV. ORIGINAL DATED: 02JUN2014. COMPLIED WITH FAA DER FORM 8110-3 APPROVAL: FAA2016-104 DATED 01NOV2016. NLG SHOCK STRUT EQUIP. P/N: 190-70745-605, S/N: 00146 NLG SHOCK STRUT ASSY. P/N: 190-70453-605, S/N: 00146 SHIPPED LESS WHEELS, TIRES & BRAKES. SEE ATTACHMENTS FOR NIS, AD/SB STATUS AND LLP DATA					
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12.		14a. ☒ 14 CFR 43.9 Return to Service Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.		☐ Other regulation specified in Block 12	
13b. Authorized Signature:		14b. Authorized Signature: 		14c. Approval Certificate No.: RJ3R817L	
13d. Name:		14d. Name: Crystal Enriquez		14e. Date: (dd/mm/yyyy) 26 Jan. 2017	
13e. Date:					
USER / INSTALLER RESPONSIBILITIES					
Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly. 2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1. 3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.					

1. Approving Competent Authority/Country LBA / Germany		2. AUTHORIZED RELEASE CERTIFICATE EASA FORM 1		3. Form Tracking Number 107319	
4. Organisation Name and Address  Lufthansa Technik Lufthansa Technik AG Weg beim Jäger 193 22335 Hamburg Germany		5. Work Order/Contract/Invoice 660010101 /		11. Status/Work OVERHAULED	
6. Item	7. Description	8. Part No.	9. Qty.	10. Serial No.	11. Status/Work
001	NLG SHOCK STRUT EQUIPPED	190-70450-403	1	00146	OVERHAULED
12. Remarks: Life Details: TSN: 21974-07 CSN: 18657-00 TSO: ZERO CSO: ZERO Y0007917 OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM CHAPTER 32-21-02 REV 15 DATED 29FEB2016. ACCOMPLISHED EMBRAER SB'S: 190-32-0032, 190-32-0050, 190-32-0051, 190-32-0052, 190-32-0057, 190-32-0058. COMPLIED WITH HPA REPAIR SPECIFICATION: RS-ENG-243 REV. ORIGINAL DATED: 02JUN2014. COMPLIED WITH FAA DER FORM 8110-3 APPROVAL: FAA2016-104 DATED 01NOV2016. NLG SHOCK STRUT EQUIP. P/N: 190-70745-605, S/N: 00146 NLG SHOCK STRUT ASSY. P/N: 190-70453-605, S/N: 00146 SHIPPED LESS WHEELS, TIRES & BRAKES. SEE ATTACHMENTS FOR NIS, AD/SB STATUS AND LLP DATA					
Work performed by Hawker Pacific Aerospace, Sun Valley, CA, USA, a Lufthansa Technik Group Company ☒ Further details of work performed are attached either in a Workshop Reporter in other applicable documents					
13a. Certifies that the items identified above were manufactured in conformity to:		14a. ☒ Part-145, A.50 Release to Service ☐ Other Regulation specified in block 12			
☒ approved design data and are in a condition for safe operation. ☐ non-approved design data specified in block 12		Certifies that unless otherwise specified in block 12, the work, identified in block 11 and described in block 12, was accomplished in accordance with Part-145 and in respect to that work the items are considered ready for release to service.			
13b. Authorized Signature	13c. Approval/Authorisation Number	14b. Authorized Signature		14c. Certificate / Approval Ref. Number	
				DE.145.0001	
13d. Name	13e. Date (dd mmm/yyyy)	14d. Name		14e. Date (dd mmm/yyyy)	
		Crystal Enriquez		26 Jan 2017	

EASA FORM 1 - Issue 2 USER/INSTALLER RESPONSIBILITIES

Note: This certificate does not automatically constitute authority to install.

Where the user/installer performs work in accordance with regulations of an airworthiness authority different from the airworthiness authority specified in block 1, it is essential that the user/installer ensures that higher airworthiness authority accepts items from the airworthiness authority specified in block 1.

Statements in block(s) 13a and 14a do not constitute installation certification. In all cases aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

- Final Teardown Report -

 HAWKER PACIFIC AEROSPACE FAA Repair Station RJ3R817L	Hawker Pacific Aerospace 11240 Sherman Way Sun Valley, CA. 91352 USA Tel: (818) 765-6201 Fax: (818) 765-4158	Sales Ord. 660010101 Receipt Date Oct 6, 2016 Customer COMPANIA PANAMENA DE AVIACION/LMS Customer P.O. Y0007917 Urgency Normal Tail # HP1567
---	--	---

Receiving Planner Work Order Information				
Qty	P.O. Part Number	Description	Serial Number	Manufacturer
1	190-70450-403	NLG SHOCK STRUT EQUIPPED	00146	ELEB - EQUIPAMENTOS LTDA DO BRASIL
		Customer Reported Discrepancy	CSO	TSO
		N/A	-	-
		N/A		18657.00
		OVERHAUL		TSN
				21974-07

Initial Evaluation Results

RECEIVED NLG SHOCK STRUT EQUIP PN 190-70745-401 AND ASSY PN 190-70453-601 IN FAIR CONDITION. THE FOLLOWING PARTS WERE REPLACED IN ORDER TO IMPROVE THE TURN AROUND TIME (TAT): 1) SLIDING TUBE ASSY PN 190-70465-401, SN 1171876/001 REMOVED OFF COPA HP-1567 WAS REPLACED WITH SN 1231409/001 REMOVED OFF COPA HK-4560 (MSN: 19000208). 2) LOWER TORQUE LINK ASSY PN 190-70466-401, SN 1171388/001 REMOVED OFF COPA HP-1567 WAS REPLACED WITH SN 1100130/001 REMOVED OFF JETBLUE N229JB (MSN: 19000032). 3) UPPER TORQUE LINK ASSY PN 190-70468-403, SN 1171865/001 REMOVED OFF COPA HP-1567 WAS REPLACED WITH SN 1170597/001 REMOVED OFF COPA HK-4505 (MSN: 19000114). 4) STEERING CYLINDER PN 170-70480-003, SN 1357235/005 REMOVED OFF COPA HP-1567 WAS REPLACED WITH SN 1309806/008 REMOVED OFF JETBLUE N197JB (MSN: 19000020). 5) STEERING CYLINDER PN 170-70480-003, SN 1357235/004 REMOVED OFF COPA HP-1567 WAS REPLACED WITH PN 170-70480-001, SN 1105876/001 REMOVED OFF JETBLUE N248JB (MSN: 19000045). 6) LOWER CAM PN 190-70470-001, SN 1160332/002 REMOVED OFF COPA HP-1567 WAS REPLACED WITH NEW UNIT, PN 190-70470-301, SN 1597639/001. 7) WHEEL AXLE PN 190-70460-001, SN 115389/005 REMOVED OFF COPA HP-1567 WAS REPLACED WITH NEW UNIT, PN 190-70460-311, SN 1581193/002. SEE ATTACHMENTS FOR PARTS REQUIRING REPAIR CONCESSIONS (IDR). ALL OTHER PARTS WERE RELEASED FOR OVERHAUL, PRESENTED NORMAL WEAR CONDITIONS, AND WERE DETERMINED TO BE DIMENSIONALLY ACCEPTABLE PER OHM LIMITS. UNIT WILL BE OVERHAULED IAW LIEBHERR CMM 32-21-02.

Initial Test

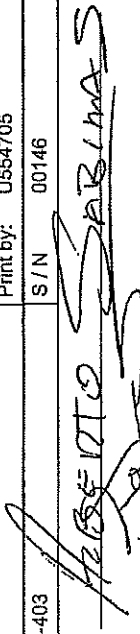
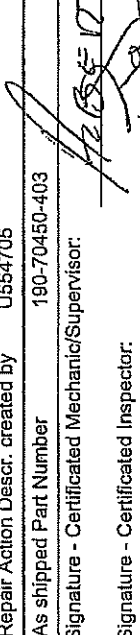
Repair Action Description

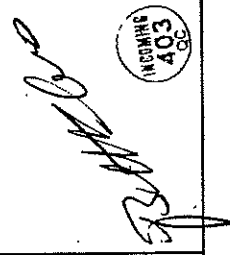
Work accomplished

OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM CHAPTER 32-21-02 REV 15 DATED 29FEB2016.
 SHIPPED LESS WHEELS, TIRES, & BRAKES. ACCOMPLISHED EMBRAER SB'S: 190-32-0050, 190-32-0052, 190-32-0057, 190-32-0058.

COMPLIED WITH HPA REPAIR SPECIFICATION: RS-ENG-243 REV. ORIGINAL DATED: 02JUN2014
 COMPLIED WITH FAA DER FORM 8110-3 APPROVAL: FAA2016-104 DATED 01NOV2016

TSO: 0:00
 CSO: 0:00
 RSL: UNLIMITED
 NLG SHOCK STRUT EQUIP. P/N: 190-70745-605, S/N: 00146
 NLG SHOCK STRUT ASSY. P/N: 190-70453-605, S/N: 00146
 SEE ATTACHMENTS FOR NIS, AD/IB STATUS, AND LLP DATA

Repair Action Descr. created by	U554705	Print by:	U554705	Print at:	Jan 19, 2017
As shipped Part Number	190-70450-403	S / N	00146	Publication	32-21-02
Signature - Certificated Mechanic/Supervisor:		Cert #:	3871720	Date:	JAN 25 2017
Signature - Certificated Inspector:		Cert #:	30413312	Date:	JAN 25 2017

		171472		Mat. Class R
Installation / Serviceable				
Description NLG SHOCK STRUT EQUIPPED				
Partnumber 190-70450-403		ATA Chapter 32-21-02		
Serial- / Batchnumber 00146		Condition OH		
Plate Mod Status				
Manuf. Date UNK	TSN 21974	CSN 18657	Shelf Life Expiry 24. Jan. 2027	
Owner 53583		Remarks Req: HT (HARD TIME) 20000 C 3650 D		
Certifying Company C1008				
Certifying Number 107319		Certifying Date 26. Jan. 2017		
Supplier HAWKER PACIFIC AEROSPACE				
Ordernumber Y0007917	Received at Station / Store / Location SJO / MAIN / TEMPORARY			
Receiving Date 29. Jan. 2017		Certifying Stamp 		
Received by 20973GB				

F-STR-042A R0 032414

		171472	
Removal / Unserviceable			
Description			
Partnumber			
Serial Number			
Action performed on A/C or Assembly			
Aircraft			
Position			
Total A/C Hours	Total A/C Cycles	Spec. Counter 1	
Workorder Number		Spec. Counter 2	
Reason for Removal		☐ Scheduled ☐ Unscheduled	
Removal Text			
Date		Station	
Name		Part	
		Certifying Stamp	

W106390



Business Park, Torre Norte, Costa del Este, Apartado 06819, Zona 0816, Panamá, Panamá
Tel: (507) 304-2672; Fax: (507) 304-2696
www.copaair.com

May 9th, 2017

QA-43-2017

LOG CARD MODIFICATION AUTHORIZATION STATEMENT

To whom it may concern:

This document grants the Avianca's Authorization to fill out the new Log Cards for Landing Gear assemblies on 19000122 HK-4507. This Authorization is related to the TSN, CSN and Installation and removal data included on NIS: QA-58-2016 dated on October 5, 2016 and the copies of Log Cards provided, documents that endorsement all the information concerned to the Maintenance actions carried out during the Landing gear operation for Copa Airlines.

This Authorization covers following Landing Gear Major Assemblies Log Card:

DESCRIPTION	PN	SN
LH MLG LOCKING STAY	190-70250-409	00304
RH MLG LOCKING STAY	190-70250-409	00306
NLG SHOCK STRUT	190-70453-601	00146

This Authorization applies only for the Major assemblies listed above, cannot be used to change any other component data on some airplane that has been operated by Copa Airlines or Aero República.

Best regards,


Virgilio De Mares
QA-Manager
Copa Airlines - Holding

Cc File

LIFE LIMIT PARTS STATUS LIST

Aircraft N988TA (MSN 18000285)

As of: 27/04/2017

NLG SHOCK STRUT ASSY

P/N: 190-70463-005		CSN: 18658		TSN: 21975.93		Installation Date: 25/02/2017							
S/N: 00148		CSO: 1		TSO: 1.82									
ITEM No.	PART DESCRIPTION	PART NUMBER	SERIAL NUMBER	TBR	TSD	CSN	CSO	LIFE LIMIT	CYCLES LIFE REMAINING	OVR LIMIT (CYCLES)	CYCLES OVR REMAINING	OVR LIMIT (DAYS)	DAYS OVR REMAINING
1.	MAIN FITTING	190-70463-005	1150414001	21975.93	1.82	18,658	1	58,000	37,342	20,000	18,342	3650	3,580
2.	SLIDING TUBE	190-70464-001	1173054001	19209.82	1.82	16,334	1	58,000	39,666	20,000	19,666	3650	3,580
3.	WHEEL AXLE	190-70460-011	1581193002	1.82	-	1	-	58,000	55,999	20,000	18,999	3650	3,580
4.	LOWER CAM	190-70470-001	1897839001	1.82	-	1	-	58,000	55,999	20,000	18,999	3650	3,580
5.	UPPER CAM	190-70471-001	1150972009	21975.93	1.82	18,658	1	58,000	37,342	20,000	18,342	3650	3,580
6.	DB ACT PIN	190-70467-001	1160334009	21975.93	1.82	18,658	1	58,000	37,342	20,000	18,342	3650	3,580
7.	UPPER TORQUE LINK	190-70468-006	AP0421	21305.83	1.82	18,757	1	58,000	37,243	20,000	18,243	3650	3,580
8.	LOWER TORQUE LINK	190-70469-005	AP0112	22318.95	1.82	17,558	1	58,000	38,442	20,000	18,442	3650	3,580
9.	RACK	170-70475-001	810551603	21975.93	1.82	18,658	1	58,000	37,342	20,000	18,342	3650	3,580
10.	STEERING CYLINDER	170-70460-001	1105078001	27765.54	1.82	17,211	1	82,400	65,189	20,000	18,999	3650	3,580
11.	STEERING CYLINDER	170-70460-003	1909898006	14050.07	1.82	8,954	1	82,400	73,446	20,000	18,999	3650	3,580
12.	LEFT PINTLE PIN	190-70465-001	1134174017	21075.93	1.82	18,258	1	58,000	37,342	20,000	18,342	3650	3,580
13.	RIGHT PINTLE PIN	190-70465-001	1160914054	21975.93	1.82	18,658	1	58,000	37,342	20,000	18,342	3650	3,580
14.	STEERING CUFF	190-70478-001	1541983002	21075.93	1.82	18,258	1	58,000	37,342	20,000	18,342	3650	3,580
15.	PINION	170-70475-003	PTC04763018	21975.93	1.82	18,658	1	58,000	37,342	20,000	18,342	3650	3,580

NLG DRAG BRACE

P/N: 190-70550-403		CSN: 18334		TSN: 19209.82		Installation Date: 25/02/2017							
S/N: 00285		CSO: 1		TSO: 1.82									
ITEM No.	PART DESCRIPTION	PART NUMBER	SERIAL NUMBER	TBR	TSD	CSN	CSO	LIFE LIMIT	CYCLES LIFE REMAINING	OVR LIMIT (CYCLES)	CYCLES OVR REMAINING	OVR LIMIT (DAYS)	DAYS OVR REMAINING
1.	UPPER BRACE	190-70553-005	1209898005	19209.82	1.82	16,334	1	58,000	39,666	20,000	19,666	3650	3,580
2.	LOWER BRACE	190-70558-001	1209898004	19209.82	1.82	16,334	1	58,000	39,666	20,000	19,666	3650	3,580
3.	MIDDLE AXLE	190-70560-001	1182352013	19209.82	1.82	16,334	1	58,000	39,666	20,000	19,666	3650	3,580
4.	PINTLE PIN	190-70555-001	1189174017	19209.82	1.82	16,334	1	58,000	39,666	20,000	19,666	3650	3,580
5.	PINTLE PIN	190-70555-001	1189174030	19209.82	1.82	16,334	1	58,000	39,666	20,000	19,666	3650	3,580

NLG LOCKING STAY

P/N: 190-70650-401		CSN: 17348		TSN: 28204.48		Installation Date: 28/02/2017							
S/N: 00085		CSO: 1		TSO: 1.82									
ITEM No.	PART DESCRIPTION	PART NUMBER	SERIAL NUMBER	TBR	TSD	CSN	CSO	LIFE LIMIT	CYCLES LIFE REMAINING	OVR LIMIT (CYCLES)	CYCLES OVR REMAINING	OVR LIMIT (DAYS)	DAYS OVR REMAINING
1	LOCKING UPPER STAY	170-70655-003	1154467001	21975.99	1.82	18,658	1	58,000	37,342	20,000	19,342	3650	3,580
2	LOCKING LOWER STAY	180-70658-003	AP0194	28204.48	1.82	17,346	1	58,000	38,654	20,000	19,999	3650	3,590
3	CARDAN	170-70667-001	1105102010	28204.48	1.82	17,346	1	58,000	38,654	20,000	19,999	3650	3,590

Signature: 
 Name: Roberto Castro
 Position: ATR/EL Engineer

Signature: 
 Name: Carlos Dominguez
 Position: QC Manager

LIFE LIMIT REPORT	
11240 SHERMAN WAY SUN VALLEY, CA 91352	HAWKER PACIFIC AEROSPACE
FAA REPAIR STATION RJ3R817L PAGE 1 OF 1	
REMOVAL	
A/C #: HP-1567	A/C S/N: 19000174
POS: NLG	
DATE: Oct-16	REASON: OVERHAUL
INSTALL	
A/C #: 660010101	
CUST PO#: Y0007917	
CUST P/N: N/A	
MFG P/N: 190-70450-403	
MFG S/N: 00146	
ELIGIBILITY: E190/E195	
DATE: Feb-17	

E190/E195 NLG ASSEMBLY

AS RECEIVED BY HPA									
CUSTOMER ITEM No.	MFG P/N	NOMENCLATURE	MFG S/N	SAFE LIFE LIMITS	CYCLES SINCE NEW	REMAINING SAFE LIFE	MFG P/N	MFG S/N	CYCLES SINCE NEW
***	190-70450-403	NLG SHOCK STRUT	00146	UNLIMITED	18,657	N/A	190-70450-403	00146	18,657
***	190-70453-601	NLG SHOCK STRUT ASSY	00146	UNLIMITED	18,657	N/A	190-70453-605	00146	18,657
***	190-70500-403	MAIN FITTING ASSEMBLY	1171841/001	UNLIMITED	18,657	N/A	190-70500-405	1171841/001	18,657
***	190-70455-003	MAIN FITTING	1150414/001	56,000	18,657	37,343	190-70455-003	1150414/001	18,657
***	190-70465-401	SLIDING TUBE ASSY	1171876/001	UNLIMITED	18,657	REPLACED	190-70465-403	1231409/001	16,333
***	190-70464-001	SLIDING TUBE	1150409/002	56,000	18,657	REPLACED	190-70464-001	1173054/001	16,333
***	190-70460-001	WHEEL AXLE	1153890/005	56,000	18,657	REPLACED	190-70460-311	1581193/002	0
***	190-70470-001	LOWER CAM	1160332/002	56,000	18,657	REPLACED	190-70470-301	1597639/001	0
***	190-70471-001	UPPER CAM	1150972/006	56,000	18,657	37,343	190-70471-001	1150972/006	18,657
***	190-70497-001	DRAG BRACE ATTACH PIN	1160334/009	56,000	18,657	37,343	190-70497-001	1160334/009	18,657
***	190-70468-403	UPR TORQUE LINK ASSY	1171855/001	UNLIMITED	18,657	REPLACED	190-70468-403	1170597/001	18,756
***	190-70469-005	UPR TORQUE LINK	AP0543	56,000	18,657	REPLACED	190-70469-005	AP0421	18,756
***	190-70466-401	LWR TORQUE LINK ASSY	1171388/001	UNLIMITED	18,657	REPLACED	190-70466-401	1100130/001	17,565
***	190-70482-003	LWR TORQUE LINK	AP0490	56,000	18,657	REPLACED	190-70482-003	AP0112	17,565
***	170-70476-901	RACK	810551/003	56,000	18,657	37,343	170-70476-901	810551/003	18,657
***	170-70480-003	STEERING CYLINDER	1357235/004	82,400	10,511	REPLACED	170-70480-001	1105876/001	17,210
***	170-70480-003	STEERING CYLINDER	1357235/005	82,400	10,511	REPLACED	170-70480-003	1309806/006	8,953
***	190-70495-001	PINPLE LEFT PIN	1134174/017	56,000	18,657	37,343	190-70495-001	1134174/017	18,657
***	190-70490-001	PINPLE RIGHT PIN	1150974/004	56,000	18,657	37,343	190-70490-001	1150974/004	18,657
***	190-70540-401	STEERING ASSEMBLY	1171891/001	UNLIMITED	18,657	N/A	190-70540-401	1171891/001	18,657
***	190-70478-001	STEERING CUFF	1141983/002	56,000	18,657	37,343	190-70478-001	1141983/002	18,657
***	170-70475-901	PINION	PTC/94753/016	56,000	18,657	37,343	170-70475-901	PTC/94753/016	18,657

PREPARED BY: 	DATE: MAR 13 2017
VERIFIED BY: 	DATE: MAR 13 2017

SAFE LIFE LIMITS HAVE BEEN REVIEWED AND VERIFIED TO APPROVED AND/OR ACCEPTED DATA.
CUMULATIVE CYCLE INFORMATION FOR EACH LIFE LIMITED COMPONENT OR ASSEMBLY
IS PROVIDED BY THE CUSTOMER. DOCUMENTATION IS RETAINED ON FILE AT THIS REPAIR FACILITY.

TPU	TECHNICAL / FLIGHT LOG	LOG PAGE 59723-28
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OPERATOR / OPERADOR		PLANT NUMBER FABRICA DE TUBOS		PIC NAME		PIC NAME		PIC NAME		TO A		TO A		TO A		N982TA		24 Feb 2017	
TAL ☒		TRU ☐																	
UNC ☐				9951															

PROVIDE		TOA		STATION		PROVIDE		TOA		STATION		PROVIDE		TOA		STATION		PROVIDE		TOA		STATION	
UNC ☐		UNC ☐		DATE		UNC ☐		UNC ☐		DATE		UNC ☐		UNC ☐		DATE		UNC ☐		UNC ☐		DATE	
TAL ☐		TAL ☐		TIME/ZONE		TAL ☐		TAL ☐		TIME/ZONE		TAL ☐		TAL ☐		TIME/ZONE		TAL ☐		TAL ☐		TIME/ZONE	
TRU ☐		TRU ☐		TIME/ZONE		TRU ☐		TRU ☐		TIME/ZONE		TRU ☐		TRU ☐		TIME/ZONE		TRU ☐		TRU ☐		TIME/ZONE	

A/T TYPE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE	
E110		☐		E110		☐		E110		☐		E110		☐		E110		☐		E110		☐	
A315		☐		A315		☐		A315		☐		A315		☐		A315		☐		A315		☐	
A320		☐		A320		☐		A320		☐		A320		☐		A320		☐		A320		☐	
A323		☐		A323		☐		A323		☐		A323		☐		A323		☐		A323		☐	

TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE	
E110		☐		E110		☐		E110		☐		E110		☐		E110		☐		E110		☐	
A315		☐		A315		☐		A315		☐		A315		☐		A315		☐		A315		☐	
A320		☐		A320		☐		A320		☐		A320		☐		A320		☐		A320		☐	
A323		☐		A323		☐		A323		☐		A323		☐		A323		☐		A323		☐	

TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE	
E110		☐		E110		☐		E110		☐		E110		☐		E110		☐		E110		☐	
A315		☐		A315		☐		A315		☐		A315		☐		A315		☐		A315		☐	
A320		☐		A320		☐		A320		☐		A320		☐		A320		☐		A320		☐	
A323		☐		A323		☐		A323		☐		A323		☐		A323		☐		A323		☐	

TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE		TYPED MESSAGE	
E110		☐		E110		☐		E110		☐		E110		☐		E110		☐		E110		☐	
A315		☐		A315		☐		A315		☐		A315		☐		A315		☐		A315		☐	
A320		☐		A320		☐		A320		☐		A											

[illegible][illegible][illegible][illegible][illegible]

CERTIFICATE OF WORK

NAME: _____
Addressed by American Translations Inc. accompanied with photo.
Certification de nomination d'adoption par l'Etat et le mari.

SIGNATURE: _____

CERTIFICATION: _____
PAR LA Mairie de GENEVE

DATED: _____
08 / 09 / 2017 16H 00 (GMT+1)

STANDARD CONVERSION TABLE TABLA DE CONVERSION ESTANDAR		
1 KG = 2.2046 LBS 1 GL = 3.7854 LTR	1 LTR = 1.77 LBS 1 GL = 6.70 LBS	1 LTR = 0.0028 KG 1 GL = 3.04 KG

COPIES FROM LOS VASOS
59723-27

CONTINUES ON LOW PAGE
59728-29

THIS COPY - REMAIN ONBOARD

11240 SHERMAN WAY
SUN VALLEY, CA 91352

HAWKER PACIFIC
AEROSPACE

FAA REPAIR STATION
RJ3R817L
PAGE 1 of 1

REMOVED		INSTALL	
A/C#:	HP-1567	A/C#:	N/A
POS:	NLG	ELIGIBILITY:	E190 / E195
DATE:	Oct-16	DATE:	Jan-17
REASON:	OVERHAUL		

[illegible]

PCW - PREVIOUSLY COMPLIED WITH
CW - COMPLIED WITH (THIS VISIT)
PARTIAL - PARTIALLY COMPLIED WITH
N/A - NOT ACCOMPLISHED
N/R - NOT REQUIRED

Engineering Representative: *Reddy* Date: JAN 20 2017

← EMBRAER		LOG CARDS	1/1 EMBRAER 190
- AIRCRAFT MODEL: ERJ 190-100LR - SERIAL NUMBER: 19000122 - CUSTOMER: AERO REPÚBLICA			
P/N	PART DESCRIPTION	S/N	
NOSE LANDING GEAR			
190-70453-401	NLG SHOCK STRUT	00146	
190-70550-403	NLG DRAG BRACE ASSY	00208	
190-70650-401	NLG LOCKING STAY	00152	
LEFT - MAIN LANDING GEAR			
190-70150-403	MLG SIDE STAY	00143	
190-70250-409	MLG LOCKING STAY	00304	
2821A0000-03	SHOCK STRUT ASSY LH	00226	
RIGHT - MAIN LANDING GEAR			
190-70150-404	MLG SIDE STAY	00140	
190-70250-409	MLG LOCKING STAY	00306	
2822A0000-03	SHOCK STRUT ASSY RH	05230	
LEFT SIDE ENGINE			
601E0100-533	THRUST REVERSER ASSY LH - LH WING	MR-EL-0270	
601E0100-534	THRUST REVERSER ASSY RH - LH WING	MR-ER-0268	
341-2001-513	COWL ASSY-FAN LH	0272001	
341-2002-507	COWL ASSY-FAN RH	0272001	
341-1011-509	INLET ASSEMBLY	0264001	
RIGHT SIDE ENGINE			
601E0100-535	THRUST REVERSER ASSY LH - RH WING	MR-EL-0273	
601E0100-536	THRUST REVERSER ASSY RH - RH WING	MR-ER-0273	
341-2001-513	COWL ASSY-FAN LH	0265001	
341-2002-507	COWL ASSY-FAN RH	0265001	
341-1011-509	INLET ASSEMBLY	0265001	
FWD/AFT BATTERY			
5912855-01	BATTERY - 24V, 27 AH, NI-CD	S01385	
5912855-01	BATTERY - 24V, 27 AH, NI-CD	S01386	
ESCAPE SLIDE			
104003-1	E. EVACUATION SLIDE ASSY, FWD	EF0409	
104003-1	E. EVACUATION SLIDE ASSY, FWD	EF0411	
104005-1	EMERG. EVACUATION SLIDE, AFT	EE0410	
104005-1	EMERG. EVACUATION SLIDE, AFT	EE0423	
Issued by <u>253049</u> Checked by <u>014</u> Date: October 22, 2007 Rev.: 1			

1. Approving Civil Aviation Authority / Country FAA / United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, Airworthiness Approval Tag			3. Form Tracking Number: 107281	
4. Organization Name and Address: HAWKER PACIFIC AEROSPACE Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352		5. Work Order/Contract/Invoice Number: 660010101 / 50339142				
6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work	
1	MAIN FITTING ASSY	190-70500-405	1	1171841/001	OVERHAULED	
12. Remarks: Life Details: CSN: 18657 TSO: ZERO CSO: ZERO OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-02 REV. 15 DATED 29FEB2016 INCLUDES P/N 190-70455-003, S/N 1150414/001 PREVIOUS OPERATOR: COPA AIRLINES, A/C HP-1567						
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12.		14a. ☒ 14 CFR 43.9 Return to Service Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.		Other regulation specified in Block 12		
13b. Authorized Signature:		13c. Approval / Authorization No.:		14c. Approval Certificate No.: RJ3R817L		
13d. Name:		13e. Date:		14e. Date: (dd/mm/yyyy) 25.Jan.2017		
14d. Name: Julio Gonzalez						
USER / INSTALLER RESPONSIBILITIES						

Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly.
2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1.
3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

1. Approving Civil Aviation
Authority / Country
FAA / United States

AUTHORIZED RELEASE CERTIFICATE

FAA Form 8130-3, Airworthiness Approval Tag

3. Form Tracking Number:
107289

4. Organization Name
and Address:



Hawker Pacific Aerospace
Repair Station No. RJ3R817L
11240 Sherman Way
Sun Valley, CA. 91352

5. Work Order/Contract/Invoice Number
660009400 / 50356921

6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	Status/Work
1	TUBE ASSEMBLY, SLIDING	190-70465-403	1	1231409/001	OVERHAULED

12. Remarks: Life Details: CSN: 16333 TSO: ZERO CSO: ZERO

OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-02 REV. 15 DATED 29FEB2016
ACCOMPLISHED EMBRAER SB: 190-32-0032, 190-32-0050, 190-32-0051, 190-32-0052, 190-32-0057, 190-32-0058

INCLUDES P/N 190-70464-001, S/N 1173054/001

PREVIOUS OPERATOR: COPA AIRLINES, A/C HK-4560

13a. Certifies the items identified above were manufactured in conformity to:
☐ Approved design data and are in condition for safe operation.
☐ Non-approved design data specified in Block 12.

14a. ☒ 14 CFR 43.9 Return to Service
Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.

13b. Authorized Signature:

13c. Approval / Authorization No.:

13d. Name:

13e. Date:

14b. Authorized Signature:
[Signature]
14c. Approval Certificate No.: **RJ3R817L**
14d. Name: Julio Gonzalez
14e. Date: 25 Jan. 2017

USER / INSTALLER RESPONSIBILITIES

Note: 1) It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly.
2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1.
3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

- Final Teardown Report -

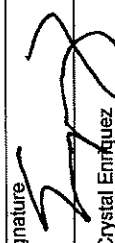
HAWKER PACIFIC AEROSPACE FAA Repair Station RJ3R817L		Hawker Pacific Aerospace 11240 Sherman Way Sun Valley, CA. 91352 USA Tel: (818) 765-6201 Fax: (818) 765-4158	Sales Ord. 660009400 Receipt Date Customer COMPANIA PANAMENA DE AVIACION/LMS Customer P.O. X04897 Urgency Tail # HK4560
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Receiving Planner Work Order Information				
Qty 1	P.O. Part Number 190-70465-401	Description TUBE ASSEMBLY, SLIDING	Serial Number 1231409/001	Manufacturer ELEB - EQUIPAMENTOS LTDA DO BRASIL
	Customer Reported Discrepancy N/A		CSO -	TSO -
Warranty N/A		Eligibility ERJ 190/195		
Customer Instructions OVERHAUL		TSN 19208:00		

Initial Evaluation Results	
RECEIVED SLIDING TUBE ASSY P/N 190-70465-401, SN 1231409/001 IN FAIR CONDITION. UNIT WAS RELEASED FOR OVERHAUL, PRESENTED NORMAL WEAR CONDITIONS, AND WAS DETERMINED TO BE DIMENSIONALLY ACCEPTABLE PER OHM LIMITS. UNIT WILL BE OVERHAULED IAW LIEBHERR CMM 32-21-02	
Initial Test	

Repair Action Description	
Work accomplished OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM CHAPTER 32-21-02 REV 15 DATED 29FEB2016 ACCOMPLISHED EMBRAER SB: 190-32-0032, 190-32-0050, 190-32-0051, 190-32-0052, 190-32-0057, 190-32-0058. TSO: 0:00 CSO: 0:00 RSL: 39667 COMPONENT IS FREE OF ANY INCIDENT OR ACCIDENT RELATED HISTORY (SEE NIS ATTACHED); PREVIOUS OPERATOR: COPA HK-4560 (MSN 19000208). NOTES: 1) NON-PROCURABLE P/N 190-70464-001, SN 1173054/001 2) FORWARD TO STOCK AND ISSUE TO SALES ORDER 660010101	

Repair Action Descr. created by U612543	Print by: U554705	Print at: Nov 10, 2016
As shipped Part Number 190-70465-403	S / N 1231409/001	Publication 32-21-02
Signature - Certified Mechanic/Supervisor:		Cert #: Date: JAN 25 2017
Signature - Certified Inspector:		Cert #: Date: JAN 25 2017

1. Approving Competent Authority/Country LBA / Germany		2. AUTHORIZED RELEASE CERTIFICATE EASA FORM 1		3. Form Tracking Number 107352			
4. Organisation Name and Address  Lufthansa Technik Lufthansa Technik AG Weg beim Jäger 193 22335 Hamburg Germany		5. Work Order/Contract/Invoice 660009400 / 50356921		6. Item 001			
7. Description TUBE ASSEMBLY, SLIDING		8. Part No. 190-70465-403		9. Qty. 10. Serial No. 1 1231409/001			
11. Status/Work OVERHAULED		12. Remarks: Life Details: TSN: 19208:00 CSN: 16333 OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-02 REV. 15 DATED 29FEB2016 ACCOMPLISHED EMBRAER SB: 190-32-0032, 190-32-0050, 190-32-0051, 190-32-0052, 190-32-0057, 190-32-0058 INCLUDES P/N 190-70464-001, S/N 1173054/001 PREVIOUS OPERATOR: COPA AIRLINES, A/C HK-4560 "Work performed by Hawker Pacific Aerospace, Sun Valley, CA, USA, a Lufthansa Technik Group Company"		13. Further details of work performed are attached either in a Workshop Report or in other applicable documents ☒		14. Other Regulation specified in block 12 ☐	
14a. Part-145.A.50 Release to Service ☒		14b. Authorized Signature 		14c. Certificate / Approval Ref. Number DE.145.0001			
14d. Name Crystal Enriquez		14e. Date (dd mm yyyy) 26 Jan 2017					

Note: This certificate does not automatically constitute authority to install.

Where the user/installer performs work in accordance with regulations of an airworthiness authority different from the airworthiness authority specified in block 1, it is essential that the user/installer ensures that higher airworthiness authority accepts items from the airworthiness authority specified in block 1.

Statements in block(s) 13a and 14a do not constitute installation certification. In all cases aircraft maintenance records must contain an installation certification in accordance with the national regulations by the user/installer before the aircraft may be flown.

May 11, 2017

Re: HPA Teardown reports

To Whom It May Concern:

I was just made aware of your concern for why some teardown reports are not signed by the lead mechanic/supervisor/manager as opposed to others. I hope this explanation satisfies your concern.

The teardown reports which are not signed by the assembly lead mechanic/Supervisor/manager are swaps (parts which aren't original to that particular gear/assembly). These are individual parts inspected by our Quality Control Inspectors therefore just the inspector's signature is required, the mechanics don't sign these because they did not "assemble" the part since it is a lone piece part which gets assembled into the landing gear or assembly. The mechanics don't see these parts until they are made serviceable by our Quality Control Inspectors and are ready for assembly. The top assembly teardown reports are always signed by the assembly lead mechanic/supervisor/manager, this is done because the assembly team actually assemble the landing gear they are signing the report for. Hope this explains the reason for why the teardown reports for swaps aren't signed by the lead mechanic/supervisor/manager and the top assemblies are.

Sincerely,



Crystal Enriquez
Quality Control Manager

Hawker Pacific Aerospace
Quality Department
11240 Sherman Way
Sun Valley, CA 91352, USA
Phone: +1-818-765-6201 ext. 251
Mobile: +1-818-251-6120
crystal.enriquez@hawker.com
www.hawker.com

Member of Lufthansa Technik Group
www.lufthansa-technik.com

662901M

11240 SHERMAN WAY
SUN VALLEY, CA 91352

LIFE LIMIT REPORT

FAA REPAIR STATION
R3R817L
PAGE 1 OF 1

REMOVAL

A/C #: HP-156/ A/C S/N: 19000174
POS: NLG
DATE: Oct-16 REASON: OVERHAUL

HPA WO#: 660010101

CUST PO#: Y0007917
CUST P/N: N/A
MFG P/N: 190-70450-403
MFG S/N: 00146

INSTALL

A/C #: N/A
ELIGIBILITY: E190/E195
DATE: Jan-17

E190 NLG ASSEMBLY

SAFE LIFE LIMITS: E190 MRB-1928 REV 10 DATED 28APR2016

CUSTOMER ITEM NO.	MFG P/N	NOMENCLATURE	MFG S/N	SAFE LIFE LIMITS	CYCLES SINCE NEW	REMAINING SAFE LIFE
***	190-70450-403	NLG SHOCK STRUT	00146	UNLIMITED	18,657	N/A
***	190-70451-401	NLG SHOCK STRUT EQUIP	00146	UNLIMITED	18,657	N/A
***	190-70453-601	NLG SHOCK STRUT ASSY	00146	UNLIMITED	18,657	N/A
***	190-70500-403	MAIN FITTING ASSEMBLY	1171841/001	UNLIMITED	18,657	N/A
***	190-70455-003	MAIN FITTING	1150414/001	UNLIMITED	18,657	37,343
***	190-70465-401	SLIDING TUBE ASSY	1171876/001	UNLIMITED	18,657	REPLACED
***	190-70464-001	SLIDING TUBE	1150409/002	UNLIMITED	18,657	REPLACED
***	190-70460-001	WHEEL AXLE	1153890/005	56,000	18,657	REPLACED
***	190-70470-001	LOWER ARM	1160332/002	56,000	18,657	REPLACED
***	190-70471-001	UPPER ARM	1150972/006	56,000	18,657	37,343
***	190-70497-001	DRAG BRACE ATTACH PIN	1160334/009	56,000	18,657	37,343
***	190-70468-403	UPR TORQUE LINK ASSY	1171855/001	UNLIMITED	18,657	REPLACED
***	190-70469-005	UPR TORQUE LINK	AP043	56,000	18,657	REPLACED
***	190-70466-401	LWR TORQUE LINK ASSY	1171388/001	UNLIMITED	18,657	REPLACED
***	190-70482-003	LWR TORQUE LINK	AP0490	56,000	18,657	REPLACED
***	170-70476-901	RACK	810551/003	56,000	18,657	37,343
***	170-70480-003	STEERING CYLINDER	1357235/004	82,400	10,511	REPLACED
***	170-70480-003	STEERING CYLINDER	1357235/005	82,400	10,511	REPLACED
***	190-70495-001	PINTE LEFT PIN	1134124/017	56,000	18,657	37,343
***	190-70490-001	PINTE RIGHT PIN	1150974/004	56,000	18,657	37,343
***	190-70500-401	STEERING ASSEMBLY	1171891/001	UNLIMITED	18,657	N/A
***	190-70478-001	STEERING CLIFF	1141983/002	56,000	18,657	37,343
***	170-70475-901	PINION	PTC94733/016	56,000	18,657	37,343

MFG P/N	MFG S/N	CYCLES SINCE NEW	REMAINING SAFE LIFE	PREVIOUS OPERATOR
190-70450-403	00146	18,657	N/A	COPA
190-70451-401	00146	18,657	N/A	COPA
190-70453-601	00146	18,657	N/A	COPA
190-70500-403	1171841/001	18,657	N/A	COPA
190-70455-003	1150414/001	18,657	37,343	COPA
190-70465-401	1231409/001	16,333	N/A	HK4560
190-70464-001	1173054/001	16,333	39,667	HK4560
190-70460-001	1501193/002	0	56,000	NEW
190-70470-001	1597639/001	0	56,000	NEW
190-70471-001	1150972/006	18,657	37,343	COPA
190-70497-001	1160334/009	18,657	37,343	COPA
190-70468-403	1170597/001	18,657	N/A	HK4505
190-70469-005	AP0421	18,657	37,244	HK4505
190-70466-401	1100130/001	17,565	N/A	N22918
190-70482-003	AP0112	17,565	38,435	N22918
170-70476-901	810551/003	18,657	37,343	COPA
170-70480-001	1105976/001	17,210	65,190	N24918
170-70480-003	1309806/006	8,553	73,447	N19728
190-70495-001	1134124/017	18,657	37,343	COPA
190-70490-001	1150974/004	18,657	37,343	COPA
190-70500-401	1171891/001	18,657	N/A	COPA
190-70478-001	1141983/002	18,657	37,343	COPA
170-70475-901	PTC94733/016	18,657	37,343	COPA

PREPARED BY: *[Signature]* DATE: JAN 25 2017

VERIFIED BY: *[Signature]* DATE: JAN 25 2017

SAFE LIFE LIMITS HAVE BEEN REVIEWED AND VERIFIED TO APPROVED AND/OR ACCEPTED DATA.
CUMULATIVE CYCLE INFORMATION FOR EACH LIFE LIMITED COMPONENT OR ASSEMBLY
IS PROVIDED BY THE CUSTOMER. DOCUMENTATION IS RETAINED ON FILE AT THIS REPAIR FACILITY.



Copa Airlines - Technical Records

NO ACCIDENT/INCIDENT LETTER

QA-041-2016

Aug 16, 2016

To whom it may concern:

It is hereby declared to the best of our knowledge, the parts listed below and its subassemblies have not been involved in any serious incident (fire, crash, failure) or accident during its time in service on ERJ-190-100 LR/ SN 19000208.

Description	Part Number Detail	Serial Number	TSN at Removal	CSN at Removal	Installation Date
NLG Shock Strut	190-70453-401	00229	19,208	16,333	Jul 30, 2008
NLG Drag Brace	190-70550-403	00295	19,208	16,333	Jul 21, 2008
NLG Locking Stay	190-70650-401	00249	19,208	16,333	Jul 21, 2008
MLG Shock Strut LH	4259A0000-02	00350	19,208	16,333	Jul 30, 2008
MLG Side Stay LH	190-70200-401	00045	19,208	16,333	Jul 22, 2008
MLG Locking Stay LH	190-70250-409	00469	19,208	16,333	Jul 22, 2008
MLG Shock Strut RH	4260A0000-02	05346	19,208	16,333	Jul 30, 2008
MLG Side Stay	190-70200-402	00045	19,208	16,333	Jul 22, 2008
MLG Locking Stay	190-70250-409	00431	19,208	16,333	Jul 22, 2008
Shimmy Damper Assy	2265A0000-03	00597	19,208	16,333	Jul 30, 2008
Shimmy Damper Assy	2265A0000-03	01114	14,525	11,788	Jul 02, 2011
Pin Pintle FWD	2821-0067	L188	13,759	10,965	Nov 02, 2010

Parts were removed from ERJ-190-100 LR / SN 19000208 on Jul 05, 2016.

Best Regards,


Virgilio Jose De Mares
QA Manager

662901M



Nose Landing Gear LLP Status

EMBRAER - MSN 19000203
Registration HK-4580

ACT TO: 19-208
ACT TO: 16-333
DATE: 2-Aug-16
DATE: 14-Jul-09

NO.	PART NUMBER	PART NUMBER	SERIAL NUMBER	LIFE LIMIT	DAYS SINCE CYCLES REMAINING	CYCLES SINCE SWHL	TOTAL TIME SWHL	PART TOTAL TIME	OVERLAP DATE	DAYS TO PART OVERLAP	DATE	COMMENTS AND NOTES
NLG SHOCK STRUT ASSY (PN 190-70453-401 & SN 00229)												
1	NLG SHOCK STRUT ASSY	190-70453-401	00229	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
1.1	TUBE SLIDING	190-70484-001	1173054001	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
1.2	AXLE, WHEEL (NLG)	190-70480-001	1173047004	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
1.3	TORQUE LINK LOWER	190-70482-003	AP0086	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
1.4	TORQUE LINK UPPER	190-70484-005	AP0824	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
1.5	WANK PITCHING	190-70455-003	1201010001	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
1.6	CAM LOWER (NLG)	190-70470-001	1198487009	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
1.7	CAM UPPER (NLG)	190-70471-001	1198877009	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
1.8	PINION	170-70476-001	PTC5015-031	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
1.9	BUFF STEERING	190-70478-001	1198024002	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
1.10	RACK (NLG)	170-70476-001	PTQ9401-039	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
1.11	PIN, PINTLE LEFT (NLG)	190-70485-001	1198315011	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
1.12	PIN, PINTLE RIGHT (NLG)	190-70480-001	1198479014	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
1.13	PIN, PINTLE ATT (NLG)	190-70487-001	1198502014	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
1.14	CYLINDER STEERING	170-70480-003	1211846003	82,400	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
1.15	CYLINDER STEERING	170-70480-003	1211846003	82,400	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
NLG Drag Brace Assy (PN 190-70550-403 & SN 00296)												
2	NLG DRAG BRACE ASSY	190-70550-403	00296	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
2.1	BRACE UPPER (NLG)	190-70553-005	1208460005	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
2.2	BRACE LOWER (NLG)	190-70556-001	1200886004	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
2.3	AXLE MIDDLE (NLG)	190-70560-001	1192362013	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
2.4	PIN PINTLE (NLG)	190-70555-001	1198174030	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
2.5	PIN PINTLE (NLG)	190-70556-001	1198174017	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
NLG Locking Stay (PN 190-70650-401 & SN 00249)												
3	NLG LOCKING STAY	190-70650-401	00249	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
3.1	STAY UPPER (NLG)	170-70656-003	1210783014	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
3.2	STAY LOWER (NLG)	190-70658-003	AP0037	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208
3.3	CARDAN	170-70687-001	1194459023	56,000	2,940	16,333	19,208	19,208	24-May-18	660	16-333	Original to MSN 19000208

[Signature]
Sergio Sánchez Brásfeld
Analista de Control de Registros
Copa Airlines

1. Approving Competent Authority/Country Luftfahrt-Bundesamt/ Germany		2. AUTHORISED RELEASE CERTIFICATE EASA FORM 1		3. Form Tracking Number 781966	
4. Organisation Name and Address LIEBHERR AEROSPACE LINDENBERG GmbH - Flughafenstr. 52-53-55 1011 Lindenbergr. Germany Phone: +49 (0)188 611 55 55 Fax: +49 (0)188 611 48 4377		5. Work Order/Contract/Invoice 417836 / 408743			
6. Item	7. Description	8. Part No.	9. Qty	10. Serial No.	11. Status/Work
1	WHEEL SHAFT AXLE WHEEL SHAFT AXLE	190-70460-311 190-70460-311	2	1581193/001 1581193/002	NEW NEW
12. Remarks SPECIFICATION: SOURCE DRAWING: 190-70460-311 ACCEPTANCE TEST: Drawing IDENT CODE: DNF: SHELF LIFE: DESTINATION: Liebherr Aerospace Saline Accounting Department 1465 Woodland Drive SALINE, MI 48178-1259					
13a. Certified that the items identified above were manufactured in conformity with: ☒ approved design data and are in condition for safe operation. ☐ non-approved design data specified in block 12.					
13b. Authorised Signature R. K. S.		13c. Approval/Authorisation Number DE-21G.0028		13d. Date (dd/mm/yyyy) 24 Aug 2015	
13e. Name Roger Christian / CS No. 42		14a. ☐ Part 145A.50 Release to Service Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12 was accomplished in accordance with Part 145 and in respect to the work the items are considered ready for release to service.		14b. ☐ Other Regulation specified in block 12	
14c. Authorised Signature		14d. Name		14e. Date (dd/mm/yyyy)	
14f. Certificate/Approval Ref. No.					
14g. Date (dd/mm/yyyy)					
User/Installer Responsibilities This certificate does not automatically constitute authority to release the item(s). Where the user/installer performs work in accordance with regulations of an airworthiness authority different from the airworthiness authority specified in block 1, Signatures in blocks 13a and 13e do not constitute installation certification. In all cases aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown. EASA Form 1 (27 Jan 2012) 27 JAN 2012 27 JAN 2012					

C&L Aviation Group

1. País (Country) BRASIL		2. AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL (BRAZILIAN CIVIL AVIATION AUTHORITY) CERTIFICADO DE LIBERAÇÃO AUTORIZADA (AUTHORIZED RELEASE CERTIFICATE) ETIQUETA DE APROVAÇÃO DE AERONAVEGABILIDADE (AIRWORTHINESS APPROVAL TAG)				3. Certificado Nº (Certificate No./System Tracking Ref.) ELB 1501002038 Pag. 1 / 1	
4. Empresa (Organization) Embraer S.A COP E-7203-01		Supplier: ELEB EQUIPAMENTOS LTDA R. Itabellana, 40, São José dos Campos - São Paulo, Brasil COP E-2000 07-01				5. Ordem Serviço/Contrato/Nota Fiscal (Work Order/Contract or Invoice) 80136479	
6. Item (Item) 001	7. Descrição (Description) CAM, LOWER-ILG SHOCK STRUT	8. Número da Peça (Part Number) 190-70470-301	9. Aplicabilidade (Eligibility) TBV	10. Quantidade (Quantity) 4	11. Número de Série/Lote (Serial/Batch Number) 1597639/001; 1597639/002; 1597639/003 1597639/004	12. Categoria/Trabalho (Status/Work) NEW	
13. Observações (Remarks) Spec Number: N/A Source Control: 190-70470-301 Rev B Acceptance Test: N/A Assembly Date: Dec.08.2015							
Partes com vida limitada devem ser acompanhadas de histórico de manutenção incluindo tempo total/ciclos/tempo, desde que novo. (Limited life parts must be accompanied by maintenance history including total time/cycle/time, since new).							
14. Certifica que o(s) item(s) acima identificados(is) (item(s) identified above was/were) manufactured in conformity to: (Certifies that the article(s) identified above was/were) manufactured in conformity to:) ☒ dados de projeto aprovados e está(is) em condição segura de operação (approved design data and are in a condition for safe operation) ☐ dados de projeto não aprovados especificados no bloco 13 (not-approved design data specified in block 13)							
15. Assinatura do Representante da ANAC (Signature ANAC Representative) Julianna							
16. Nome (Name) JULIA MARIA COUTINHO DA SILVA		17. Data (Date) DEC/15/2015		18. Autorização da ANAC (ANAC Authorization No) PCF 2015005-02		19. Outros regulamentos especificados no bloco 13 (Other regulations specified in block 13) ☐ Retorno ao serviço de acordo com RBHA 43.9 (Return to service in accordance with RBHA 43.9) ☐ Certifica que, a menos especificado no bloco 13, o trabalho especificado no bloco 12 e descrito no bloco 13 foi executado de acordo com o plano de trabalho de Homologação Aeronáutica-188-045 sem relação ao trabalho realizado a(s) peça(s) a(s) aprovada(s) (Certifies that, unless otherwise specified in block 13, this work identified in block 12 and described in block 13 was accomplished in accordance with Brazilian Regulation for Aeronautical Certification - RBHA 43 and in respect to the work performed the part(s) is/are) approved for return to service.)	
20. Pessoa Autorizada (Authorized Signature)				21. Nº COP/CHETA (Certificate Number)			
22. Nome (Name)				23. Data (Date)			

10. O INSTALADOR DEVE FAZER VERIFICAÇÃO CRUZADA DA APLICABILIDADE ATRAVÉS DOS DADOS TÉCNICOS APLICÁVEIS. (INSTALLER MUST CROSS CHECK ELIGIBILITY WITH APPLICABLE TECHNICAL DATA)

RESPONSABILIDADE DO USUÁRIO/INSTALADOR
(IT IS IMPORTANT TO UNDERSTAND THE USER/INSTALLER RESPONSIBILITY)

É IMPORTANTE COMPREENDER QUE A EXISTÊNCIA DESTES DOCUMENTOS POR SI SÓ NÃO CONSTITUI AUTOMATICAMENTE UMA AUTORIZAÇÃO PARA INSTALAR A PARTE/COMPONENTE COMUNTO.

SE O TRABALHO DO USUÁRIO/INSTALADOR É REALIZADO DE ACORDO COM OS REGULAMENTOS NACIONAIS DE UMA

AUTORIDADE DE AERONAVEGABILIDADE DIFERENTE DA AUTORIDADE DE AERONAVEGABILIDADE DO PAÍS ESPECIFICADO

NO BLOCO 1, É ESSENCIAL QUE O USUÁRIO/INSTALADOR ASSEGURE QUE A SUA AUTORIDADE DE AERONAVEGABILIDADE

BLOCO 1, PARTES/COMPONENTES COMUNS DA AUTORIDADE DE AERONAVEGABILIDADE DO PAÍS ESPECIFICADO NA

AS DECLARAÇÕES NOS BLOCOS 14 E 19 NÃO CONSTITUEM UM CERTIFICADO DE INSTALAÇÃO. EM TODOS OS CASOS, OS

REGISTROS DE MANUTENÇÃO DA AERONAVE DEVEM CONTER UM CERTIFICADO DE INSTALAÇÃO EMITIDO DE ACORDO

COM REGULAMENTOS NACIONAIS PELO USUÁRIO/INSTALADOR ANTES QUE A AERONAVE POSSA SER LIBERADA PARA

VOO.

WHERE THE USER/INSTALLER WORK IS PERFORMED IN ACCORDANCE WITH THE NATIONAL REGULATIONS OF AN AIRWORTHINESS AUTHORITY DIFFERENT THAN THE AIRWORTHINESS AUTHORITY OF THE COUNTRY SPECIFIED IN BLOCK 1, IT IS ESSENTIAL THAT THE USER/INSTALLER ENSURES THAT HIS/HER AIRWORTHINESS AUTHORITY ACCEPTS PARTS/COMPONENTS/ASSEMBLIES FROM THE AIRWORTHINESS AUTHORITY OF THE COUNTRY SPECIFIED IN BLOCK 1.

(STATEMENTS IN BLOCK 14 AND 19 DO NOT CONSTITUTE INSTALLATION CERTIFICATION. IN ALL CASES, AIRCRAFT MAINTENANCE RECORDS MUST CONTAIN AN INSTALLATION CERTIFICATION ISSUED IN ACCORDANCE WITH THE NATIONAL REGULATIONS BY THE USER/INSTALLER BEFORE THE AIRCRAFT MAY BE FLOWN.)

662399

1. Approving Civil Aviation Authority / Country FAA / United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, Airworthiness Approval Tag		3. Form Tracking Number: 107282	
4. Organization Name and Address: HAWKER PACIFIC AEROSPACE Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352		5. Work Order/Contract/Invoice Number 660010101 / 50339341			
6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work
1	CAM, UPPER	190-70471-001	1	1150972/006	OVERHAULED
12. Remarks: Life Details: CSN: 18657 TSO: ZERO CSO: ZERO					
OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-02 REV. 15 DATED 29FEB2016					
PREVIOUS OPERATOR: COPA AIRLINES, A/C HP-1567					
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12.		14a. ☒ 14 CFR 43.9 Return to Service Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.		☐ Other regulation specified in Block 12	
13b. Authorized Signature:		13c. Approval / Authorization No.:		14c. Approval Certificate No.: RJ3R817L	
13d. Name:		13e. Date:		14d. Name: Julio Gonzalez 14e. Date: 25.Jan.2017	
USER / INSTALLER RESPONSIBILITIES					

Note: 1) It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly.
2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1.
3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

1. Approving Civil Aviation Authority / Country FAA / United States		2.		3. Form Tracking Number: 107292	
4. Organization Name and Address: HAWKER PACIFIC AEROSPACE Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352		5. Work Order/Contract/Invoice Number: 660009015 / 50296178		6. Status/Work OVERHAULED	
6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work
1	TORQUE LINK UPPER ASSEMBLY	190-70468-403	1	1170597/001	OVERHAULED
12. Remarks: Life Details: CSN: 18756 TSO: ZERO CSO: ZERO OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM CHAPTER 32-21-02 REV. 15 DATED 29FEB2016 COMPLIED WITH ELEB TECHNICAL DISPOSITION: ELEB-TD 2016-080164 DATED: 06SEP2016 INCLUDES P/N 190-70469-005, S/N AP0421 PREVIOUS OPERATOR: AIRLINE - COPA AIRLINES, A/C HK-4505					
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12.					
13b. Authorized Signature:		13c. Approval / Authorization No.:		14a. ☒ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 12	
13d. Name:		13e. Date:		14b. Authorized Signature: <i>[Signature]</i> 14c. Approval Certificate No.: RJ3R817L	
14d. Name: Julio Gonzalez		14e. Date: 25-Jan-2017		14f. W 106399	
USER / INSTALLER RESPONSIBILITIES					

Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly.
2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1.
3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.



FAA Repair Station RJ3R817L

Hawker Pacific Aerospace
11240 Sherman Way
Sun Valley, CA. 91352 USA
Tel: (818) 765-6201
Fax: (818) 765-4158

Sales Ord. 660009015 Repair Order: 50296178
Receipt Date
Customer COMPANIA PANAMENA DE AVIACION/LMS
Customer P.O. X04622
Urgency
Tail # HK4505

Receiving Planner Work Order Information

Qty	P.O. Part Number	Description	Serial Number	Manufacturer	Eligibility
1	190-70468-403	TORQUE LINK UPPER ASSEMBLY	1170597/001	ELEB - EQUIPAMENTOS LTDA DO BRASIL	ERJ 190/195
	Customer Reported Discrepancy		CSO	TSO	TSN
	N/A		-	18756.00	21304-01
Warranty					
N/A					
Customer Instructions					
OVERHAUL					

Initial Evaluation Results

RECEIVED UPPER TORQUE LINK ASSY PN 190-70468-403, SN 1170597/001 IN FAIR CONDITION. UNIT WAS RELEASED FOR OVERHAUL, PRESENTED NORMAL WEAR CONDITIONS, AND WAS DE TERMINED TO BE DIMENSIONALLY ACCEPTABLE PER OHM LIMITS.
UNIT WILL BE OVERHAULED IAW LIEBHERR CMM 32-21-02.

Initial Test

Repair Action Description

Work accomplished

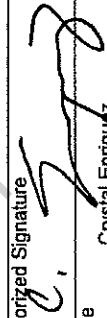
OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM CHAPTER 32-21-02 REV 15 DATED 29FEB2016.
ACCOMPLISHED EMBRAER SB: 190-32-0032, 190-32-0050, 190-32-0051, 190-32-0052, 190-32-0057, 190-32-0058.
COMPLIED WITH ELEB TECHNICAL DISPOSITION: ELEB-TD 2016-080164 DATED: 06SEP2016

TSO: 0:00
CSO: 0:00
RSL: 37244

COMPONENT IS FREE OF ANY INCIDENT OR ACCIDENT RELATED HISTORY (SEE NIS ATTACHED); PREVIOUS OPERATOR: AIRLINE - COPA HK-4505 (MSN: 19000114).
NOTES: 1) NON-PROCURABLE P/N 190-70469-005, S/N AP0421
2) FORWARD TO STOCK AND ISSUE TO SALES ORDER 660010101

W106399

Repair Action Descr. created by	U554705	Print by:	U554705	Print at:	Nov 10, 2016
As shipped Part Number	190-70468-403	S / N	1170597/001	Publication	32-21-02
Signature - Certified Mechanic/Supervisor:		Cert #:		Date:	
Signature - Certified Inspector:		Cert #:	3043312	Date:	JAN 25 2017

1. Approving Competent Authority/Country LBA / Germany		2. AUTHORIZED RELEASE CERTIFICATE EASA FORM 1				3. Form Tracking Number 107358	
4. Organisation Name and Address  Lufthansa Technik Lufthansa Technik AG Weg beim Jäger 193 22335 Hamburg Germany		5. Work Order/Contract/Invoice 660009015 / 50296178					
6. Item	7. Description	8. Part No.	9. Qty.	10. Serial No.	11. Status/Work		
001	TORQUE LINK UPPER ASSEMBLY	190-70468-403	1	1170597/001	OVERHAULED		
12. Remarks: Life Details: TSN: CSO: ZERO TSO: ZERO CSO: ZERO X04622 OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM CHAPTER 32-21-02 REV. 15 DATED 29FEB2016 COMPLIED WITH ELEB TECHNICAL DISPOSITION: ELEB-TD 2016-080164 DATED: 06SEP2016 INCLUDES P/N 190-70469-005, S/N AP0421 PREVIOUS OPERATOR: AIRLINE - COPA AIRLINES, A/C HK-4505 "Work performed by Hawker Pacific Aerospace, Sun Valley, CA, USA, a Lufthansa Technik Group Company"							
☒ Further details of work performed are attached either in a Workshop Reporter in other applicable documents ☐ Other Regulation specified in block 12							
14a. Authorized Signature 		14b. Part-145.A.50 Release to Service ☒ Certifies that unless otherwise specified in block 12, the work, identified in block 11 and described in block 12, was accomplished in accordance with Part-145 and in respect to that work the items are considered ready for release to service.		14c. Certificate / Approval Ref. Number DE.145.0001			
14d. Name Crystal Enriquez		14e. Date (dd mm yyyy) 26 Jan 2017					

EASA FORM 1 - Issue 2
USER/INSTALLER RESPONSIBILITIES

Note: This certificate does not automatically constitute authority to install.

Where the user/installer performs work in accordance with regulations of an airworthiness authority different from the airworthiness authority specified in block 1, it is essential that the user/installer ensures that higher airworthiness authority accepts items from the airworthiness authority specified in block 1.

Statements in blocks 13a and 14a do not constitute installation certification. In all cases aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

LIFE LIMIT REPORT

11240 SHERMAN WAY
SUN VALLEY, CA 91352

HAWKER PACIFIC
AEROSPACE

FAA REPAIR STATION
RJ3R817L
PAGE 1 OF 1

REMOVAL

A/C #: HP-1567
POS: NLG
DATE: Oct-16
REASON: OVERHAUL

HPA WO#: 660010101

CUST PO#: Y0007917
CUST P/N: N/A
MFG P/N: 190-70450-403
MFG S/N: 00146

INSTALL

A/C #: N/A
ELIGIBILITY: E190/E195
DATE: Jan-17

E190 NLG ASSEMBLY

SAFE LIFE LIMITS: E190 MRB-1928 REV 10 DATED 28APR2016

AS RECEIVED BY HPA

CUSTOMER ITEM No.	MFG P/N	NOMENCLATURE	MFG S/N	SAFE LIFE LIMITS	CYCLES SINCE NEW	REMAINING SAFE LIFE
***	190-70450-403	NLG SHOCK STRUT	00146	UNLIMITED	18,657	N/A
***	190-70450-401	NLG SHOCK STRUT EQUIP	00146	UNLIMITED	18,657	N/A
***	190-70453-601	NLG SHOCK STRUT ASSY	00146	UNLIMITED	18,657	N/A
***	190-70500-403	MAIN FITTING ASSEMBLY	1171841/001	56,000	18,657	37,343
***	190-70455-003	MAIN FITTING	1150414/001	UNLIMITED	18,657	REPLACED
***	190-70465-401	SLIDING TUBE ASSY	1171879/001	UNLIMITED	18,657	REPLACED
***	190-70464-001	SLIDING TUBE	1150409/002	56,000	18,657	REPLACED
***	190-70460-001	WHEEL AXLE	1153890/005	56,000	18,657	REPLACED
***	190-70470-001	LOWER CAY	1160332/002	56,000	18,657	REPLACED
***	190-70471-001	UPPER CAY	1150972/006	56,000	18,657	37,343
***	190-70497-001	DRAG BRACE ATTACH PIN	1160334/009	56,000	18,657	37,343
***	190-70468-403	UPR TORQUE LINK ASSY	1171855/001	UNLIMITED	18,657	REPLACED
***	190-70469-005	UPR TORQUE LINK	AP0543	56,000	18,657	REPLACED
***	190-70466-401	LWR TORQUE LINK ASSY	1171388/001	UNLIMITED	18,657	REPLACED
***	190-70482-003	LWR TORQUE LINK	AP0490	56,000	18,657	REPLACED
***	170-70476-901	RACK	810551/003	56,000	18,657	37,343
***	170-70480-003	STEERING CYLINDER	1357235/004	82,400	10,511	REPLACED
***	170-70480-003	STEERING CYLINDER	1357235/005	82,400	10,511	REPLACED
***	190-70495-001	PINTLE LEFT PIN	1134174/017	56,000	18,657	37,343
***	190-70490-001	PINTLE RIGHT PIN	1150974/004	56,000	18,657	37,343
***	190-70540-401	STEERING ASSEMBLY	1171891/001	UNLIMITED	18,657	N/A
***	190-70478-001	STEERING CUFF	1141983/002	56,000	18,657	37,343
***	170-70475-901	PINION	PTC794753/016	56,000	18,657	37,343

AS RELEASED BY HPA

MFG P/N	MFG S/N	CYCLES SINCE NEW	REMAINING SAFE LIFE	PREVIOUS OPERATOR
190-70450-403	00146	18,657	N/A	COPA
190-70450-401	00146	18,657	N/A	COPA
190-70453-601	00146	18,657	N/A	COPA
190-70500-405	1171841/001	18,657	N/A	COPA
190-70455-003	1150414/001	18,657	37,343	COPA
190-70465-403	1231409/001	16,333	N/A	HK4560
190-70464-001	1173054/001	16,333	39,667	HK4560
190-70460-311	1581193/002	0	56,000	NEW
190-70470-301	1597639/001	0	56,000	NEW
190-70471-001	1150972/006	18,657	37,343	COPA
190-70497-001	1160334/009	18,657	37,343	COPA
190-70468-403	1170597/001	18,756	N/A	HK4505
190-70469-005	AP0421	18,756	37,244	HK4505
190-70466-401	1100130/001	17,565	N/A	N229JB
190-70482-003	AP0112	17,565	38,435	N229JB
170-70476-901	810551/003	18,657	37,343	COPA
170-70480-001	1105876/001	17,210	65,190	N249JB
170-70480-003	1309806/006	8,953	73,447	N197JB
190-70495-001	1134174/017	18,657	37,343	COPA
190-70490-001	1150974/004	18,657	37,343	COPA
190-70540-401	1171891/001	18,657	N/A	COPA
190-70478-001	1141983/002	18,657	37,343	COPA
170-70475-901	PTC794753/016	18,657	37,343	COPA

PREPARED BY: *[Signature]*

DATE: JAN 25 2017

VERIFIED BY: *[Signature]*

DATE: JAN 25 2017

SAFE LIFE LIMITS HAVE BEEN REVIEWED AND VERIFIED TO APPROVED AND/OR ACCEPTED DATA.
CUMULATIVE CYCLE INFORMATION FOR EACH LIFE LIMITED COMPONENT OR ASSEMBLY
IS PROVIDED BY THE CUSTOMER. DOCUMENTATION IS RETAINED ON FILE AT THIS REPAIR FACILITY.

Copa AirlinesApril 25th 2017**NON INCIDENT STATEMENT CLARIFICATION LETTER**

To whom it may concern:

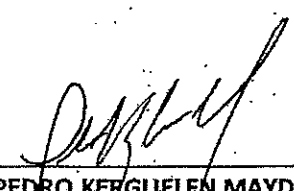
This letter is concerning Avianca's request to clarify the dissimilarity between the dates listed on the Engineering Log Card and Copa Airlines Non Incident Statement pertaining to A/C "HK-4505" MSN:19000114. The date listed on Copa Airlines Non Incident Statement "September 26th 2007" reflects the date Copa Airlines initiated the operation of Landing gears on HK-4505, for the installation date according the Original Log Card refer to the following table.

The information listed above concern to the following assemblies:

DESCRIPTION	PN	SN	INSTALLATION DATE	REMOVAL DATE
NLG SHOCK STRUT	190-70453-401	00141	AUG-29-2007	06-JUN-2016
NLG LOCKING STAY ASSY	190-70650-401	00150	AUG-15-2007	06-JUN-2016
MLG SHOCK STRUT	2822A0000-03	05192	AUG-31-2007	06-JUN-2016

This Correction statement applies only for the Major assemblies listed above, cannot be used for to change any other component or some airplane data that had been operated by Copa Airlines or Copa Airlines Colombia.

Best regards.



PEDRO KERGUELEN MAYDANA
Quality Control Manager
Copa Airlines Colombia

LIFE LIMIT PARTS STATUS LIST
 Aircraft: N982TA (MSN 19000259)
 As of: 27/04/2017

NLG SHOCK STRUT ASSY

P/N: 190-70463-005		CSN: 18466		TSN: 21975.93		Installation Date: 25/02/2017							
S/N: 00146		CSO: 1		TSO: 1.82									
ITEM No.	PART DESCRIPTION	PART NUMBER	SERIAL NUMBER	TEN	TSO	CSN	CSO	LIFE LIMIT	CYCLE LIFE REMAINING	OVR LIMIT (CYCLES)	CYCLE OVR REMAINING	OVR LIMIT (DAYS)	DAYS OVR REMAINING
1	MAIN FITTING	190-70465-003	1150444001	21975.93	1.82	18,858	1	56,000	37,342	20,000	18,999	3650	3,599
2	SLIDING TUBE	190-70464-001	1178084001	18209.82	1.82	18,854	1	56,000	38,866	20,000	18,999	3650	3,599
3	WHEEL AXLE	190-70460-011	1881193002	1.82	-	1	-	56,000	55,999	20,000	18,999	3650	3,599
4	LOWER CAM	190-70470-001	1887838001	1.82	-	1	-	56,000	55,999	20,000	18,999	3650	3,599
5	UPPER CAM	190-70471-001	1169972008	21975.93	1.82	18,858	1	56,000	37,342	20,000	18,999	3650	3,599
6	DS ATT PIN	190-70457-001	1180334009	21975.93	1.82	18,858	1	56,000	37,342	20,000	18,999	3650	3,599
7	UPPER TORQUE LINK	190-70469-005	AP0421	21305.83	1.82	18,757	1	56,000	37,243	20,000	18,999	3650	3,599
8	LOWER TORQUE LINK	190-70462-009	AP0112	28319.95	1.82	17,289	1	56,000	38,434	20,000	18,999	3650	3,599
9	BACK	170-70478-001	810851002	21975.93	1.82	18,858	1	56,000	37,342	20,000	18,999	3650	3,599
10	STEERING CYLINDER	170-70480-001	1105679001	27765.52	1.82	17,211	1	62,400	65,189	20,000	18,999	3650	3,599
11	STEERING CYLINDER	170-70480-003	1309666005	14061.09	1.82	8,954	1	62,400	73,446	20,000	18,999	3650	3,599
12	LEFT PINTLE PIN	190-70465-001	1134174017	21975.93	1.82	18,858	1	56,000	37,342	20,000	18,999	3650	3,599
13	RIGHT PINTLE PIN	190-70466-001	1160974004	21975.93	1.82	18,858	1	56,000	37,342	20,000	18,999	3650	3,599
14	STEERING CUP	190-70476-001	1141983002	21975.93	1.82	18,858	1	56,000	37,342	20,000	18,999	3650	3,599
15	PINION	170-70475-001	PTG04233018	21975.93	1.82	18,858	1	56,000	37,342	20,000	18,999	3650	3,599

NLG DRAG BRACE

RES: DISC: DRIVE													
P/N: 190-70650-003		CSN: 18334		TSN: 19209.82		Installation Date: 28/02/2017							
S/N: 00295		CSO: 1		TSO: 1.82									
ITEM No.	PART DESCRIPTION	PART NUMBER	SERIAL NUMBER	TEN	TSO	CSN	CSO	LIFE LIMIT	CYCLE LIFE REMAINING	OVR LIMIT (CYCLES)	CYCLE OVR REMAINING	OVR LIMIT (DAYS)	DAYS OVR REMAINING
1	UPPER BRACE	190-70653-005	1209948006	19209.82	1.82	18,334	1	56,000	39,568	20,000	18,999	3650	3,599
2	LOWER BRACE	190-70654-001	1209966004	19209.82	1.82	18,334	1	56,000	39,568	20,000	18,999	3650	3,599
3	MIDDLE AXLE	190-70650-001	1182360013	19209.82	1.82	18,334	1	56,000	39,568	20,000	18,999	3650	3,599
4	PINTLE PIN	190-70655-001	1189174017	19209.82	1.82	18,334	1	56,000	39,568	20,000	18,999	3650	3,599
5	PINTLE PIN	190-70655-001	1189174030	19209.82	1.82	18,334	1	56,000	39,568	20,000	18,999	3650	3,599

NLG LOCKING STAY

RED LOCKING STAY		CSN: 17348		TSN: 21204.48		Installation Date: 28/02/2017							
P/N: 190-70650-001		CSO: 1		TSO: 1.82									
S/N: 00065													
ITEM No.	PART DESCRIPTION	PART NUMBER	SERIAL NUMBER	TEN	TSO	CSN	CSO	LIFE LIMIT	CYCLE LIFE REMAINING	OVR LIMIT (CYCLES)	CYCLE OVR REMAINING	OVR LIMIT (DAYS)	DAYS OVR REMAINING
1	LOCKING UPPER STAY	170-70656-003	1164467001	21975.93	1.82	18,858	1	56,000	37,342	20,000	18,999	3650	3,599
2	LOCKING LOWER STAY	190-70658-003	AP0184	28204.48	1.82	17,348	1	56,000	38,654	20,000	18,999	3650	3,599
3	CARDAN	170-70667-001	1105102010	28204.48	1.82	17,348	1	56,000	38,654	20,000	18,999	3650	3,599

Signature: 
 Name: Roberto Castro
 Position: ATR760 Engineer

Signature: 
 Name: Carlos Domínguez
 Position: QC Manager



Copa Airlines – Technical Records

NO ACCIDENT/ INCIDENT LETTER

QA-33-2016

June 10, 2016.

To Whom it may Concern:

It is hereby declared to the best of our knowledge, the parts listed below and its sub-Assemblies, have not been involved in any serious incident (fire, crash, failure) or accident during its time in service on ERJ-190-100 IGW/ SN 19000114

Description	Part Number Detail	Serial Number	TSN at Removal	CSN at Removal
NLG Shock Strut	190-70453-401	00141	21304:01	18756.00
NLG Drag Brace	190-70550-403	00196	21304:01	18756.00
NLG Locking Stay	190-70650-401	00150	21304:01	18756.00
MLG Shock Strut LH	2821A0000-04	00185	21304:01	18756.00
MLG Side Stay LH	190-70150-403	00153	21304:01	18756.00
MLG Locking Stay	190-70250-409	00291	21304:01	18756.00
MLG Shock Strut RH	2822A0000-04	05192	21304:01	18756.00
MLG Side Stay	190-70150-404	00127	21304:01	18756.00
MLG Locking Stay	190-70250-409	00290	21304:01	18756.00
Shimmy Damper Assy	2265A0000-02	00326	21304:01	18756.00
Shimmy Damper Assy	2265A0000-02	00306	21304:01	18756.00

Parts were installed on September 26, 2007 and removed from ERJ-190-100 IGW / SN 19000114 on June 06, 2016.

Best Regards

Virgilio De Mares
QA Mx Manager
VP Safety & Quality
Copa Airlines

Cc File-

1. Approving Civil Aviation Authority / Country FAA / United States		2. Form Tracking Number: 007295	
4. Organization Name and Address: HAWKER PACIFIC AEROSPACE Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352		5. Work Order/Contract/Invoice Number: 660008969 / 50266391	
6. Item	7. Description	8. Part Number	9. Quantity
1	TORQUE LINK LOWER ASSEMBLY	190-70466-401	1
10. Serial Number		11. Status/Work	
1100130/001		OVERHAULED	
12. Remarks: Life Details: CSN: 17565 TSO: ZERO CSO: ZERO			
OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-02 REV. 15 DATED 29FEB2016 COMPLIED WITH ELEB TECHNICAL DISPOSITION: ELEB-TD 2016-060818 DATED: 01JUL2016			
INCLUDES P/N 190-70482-003, S/N AP0112			
PREVIOUS OPERATOR: JETBLUE, A/C N229JB			
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12.		14a. ☒ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.	
13b. Authorized Signature:		14b. Authorized Signature: <i>Julio Gonzalez</i> HPI 80	
13c. Approval / Authorization No.:		14c. Approval Certificate No.: RJ3R817L	
13d. Name:		14d. Name: Julio Gonzalez	
13e. Date:		14e. Date: (dd/mm/yyyy) 25.Jan.2017	
USER / INSTALLER RESPONSIBILITIES			

Note: 1) It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly.
2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1.
3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

- Final Teardown Report -

 HAWKER PACIFIC AEROSPACE FAA Repair Station RJ3R817L		Hawker Pacific Aerospace 11240 Sherman Way Sun Valley, CA. 91362 USA Tel: (818) 765-6201 Fax: (818) 765-4158	Sales Ord. 660008969 Receipt Date Customer Jet Blue Airways Customer P.O. RO1836340 Urgency Repair Order: 50266391 Tail # N229JB
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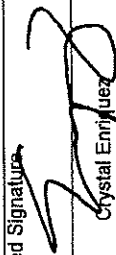
Receiving Planner Work Order Information				
Qty 1	P.O. Part Number 190-70466-401	Description TORQUE LINK LOWER ASSEMBLY	Serial Number 1100130/001	Manufacturer ELEB - EQUIPAMENTOS LTDA DO BRASIL
	Customer Reported Discrepancy N/A		CSO -	TSO -
	Warranty N/A		CSN 17565.00	28318.08
Customer Instructions OVERHAUL				

Initial Test
Initial Evaluation Results RECEIVED LOWER TORQUE LINK ASSY PN 190-70466-401, SN 1100130/001 IN FAIR CONDITION. UNIT WAS RELEASED FOR OVERHAUL, PRESENTED NORMAL WEAR CONDITIONS, AND WAS DETERMINED TO BE DIMENSIONALLY ACCEPTABLE PER OHM LIMITS. UNIT WILL BE OVERHAULED IAW LIEBHERR CMM 32-21-02.

Work accomplished	Repair Action Description
OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM CHAPTER 32-21-02 REV 15 DATED 29FEB2016.	
ACCOMPLISHED EMBRAER SB: 190-32-0032, 190-32-0050, 190-32-0051, 190-32-0052, 190-32-0057, 190-32-0058. COMPLIED WITH ELEB TECHNICAL DISPOSITION: ELEB-TD 2016-060818 DATED: 01JUL2016	
TSO: 0:00 CSO: 0:00 RSL: 38435	
COMPONENT IS FREE OF ANY INCIDENT OR ACCIDENT RELATED HISTORY (SEE NIS ATTACHED); PREVIOUS OPERATOR: JETBLUE N229JB (MSN: 19000032). NOTES: 1) NON-PROCURABLE P/N 190-70482-003, S/N AP0112 2) FORWARD TO STOCK AND ISSUE TO SALES ORDER 660010101	

Repair Action Descr. created by U554705	Print by: U554705	Print at: Nov 10, 2016
As shipped Part Number 190-70466-401	S / N 1100130/001	Publication 32-21-02
Signature - Certified Mechanic/Supervisor:	Cert #: 3043312	Date: JAN 2 5 2017
Signature - Certified Inspector:	Cert #:	Date:

662901M

1. Approving Competent Authority/Country LBA / Germany		2. AUTHORIZED RELEASE CERTIFICATE EASA FORM 1				3. Form Tracking Number 107359	
4. Organisation Name and Address  Lufthansa Technik Lufthansa Technik AG Weg beim Jäger 193 22335 Hamburg Germany		5. Work Order/Contract/Invoice 660008969 / 50266391					
6. Item	7. Description	8. Part No.	9. Qty.	10. Serial No.	11. Status/Work		
001	TORQUE LINK LOWER ASSEMBLY	190-70468-401	1	1100130/001	OVERHAULED		
12. Remarks: Life Details: TSN: CSN: 17665.00 TSO: ZERO CSO: ZERO RO1836340 OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-02 REV. 15 DATED 29FEB2016 COMPLIED WITH ELEB TECHNICAL DISPOSITION: ELEB-TD 2016-060818 DATED: 01JUL2016 INCLUDES P/N 190-70482-003, S/N AP0112 PREVIOUS OPERATOR: JETBLUE, A/C N229JB "Work performed by Hawker Pacific Aerospace, Sun Valley, CA, USA, a Lufthansa Technik Group Company" ☒ Further details of work performed are attached either in a Workshop Report or in other applicable documents ☐ Other Regulation specified in block 12							
14a. ☒ Part-145, A.50 Release to Service ☐ Other Regulation specified in block 12		14b. Authorized Signature  Certifies that unless otherwise specified in block 12, the work, identified in block 11 and described in block 12, was accomplished in accordance with Part-145 and in respect to that work the items are considered ready for release to service.					
14c. Certificate / Approval Ref. Number DE.145.0001		14d. Name Crystal Enriquez					
14e. Date (dd mm yyyy) 26 Jan 2017							

EASA FORM 1 - Issue 2
USER/INSTALLER RESPONSIBILITIES

Note: This certificate does not automatically constitute authority to install.

Where the user/installer performs work in accordance with regulations of an airworthiness authority different from the airworthiness authority specified in block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts items from the airworthiness authority specified in block 1.

Statements in block(s) 13a and 14a do not constitute installation certification. In all cases aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.



May 11, 2017 Revision 1

To Whom It May Concern

Dear Sirs:

JetBlue Airways hereby certifies that the Gear and Shock Strut arrangements, listed below were installed on **April 6, 2006** and removed from JetBlue Airways aircraft MSN **190 00032** on **May 5, 2016**:

NLG Shock Strut

PN 190-70450-403

SN 00046

It is further certified that to the best of our knowledge the aircraft from which this part was removed, while in the possession of JetBlue Airways, was not involved in any major incident or accident, and was not subject to severe stress, damage or major defects.

During this period, **17,565** cycles and **28,318:08** hours was accumulated on the part/aircraft combination during service with JetBlue Airways.

Sincerely,

A handwritten signature in cursive script, appearing to read "A. Thomas".

Anthony Thomas
Supervisor, Quality Assurance
Technical Operations
JetBlue Airways



662901M

LIFE LIMIT REPORT

11240 SHERMAN WAY
SUN VALLEY, CA 91352

HAWKER PACIFIC
AEROSPACE

FAA REPAIR STATION
RJ3R817L
PAGE 1 OF 1

REMOVAL		INSTALL	
A/C #:	HP-1367	A/C S/N:	19000174
POS:	NLG	CUST P/N:	N/A
DATE:	Oct-16	REASON:	OVERHAUL
HPA WO#:		660010101	
CUST PO#:		Y0007917	
MFG P/N:		190-70450-403	
MFG S/N:		00146	

E190 NLG ASSEMBLY

SAFE LIFE LIMITS: E190 MRB-1928 REV 10 DATED 28APR2016											
AS RECEIVED BY HPA							AS RELEASED BY HPA				
CUSTOMER ITEM No.	MFG P/N	NOMENCLATURE	MFG S/N	SAFE LIFE LIMITS	CYCLES SINCE NEW	REMAINING SAFE LIFE	MFG P/N	MFG S/N	CYCLES SINCE NEW	REMAINING SAFE LIFE	PREVIOUS OPERATOR
***	190-70450-403	NLG SHOCK STRUT	00146	UNLIMITED	18,657	N/A	190-70450-403	00146	18,657	N/A	COPA
***	190-70745-401	NLG SHOCK STRUT EQUIP	00146	UNLIMITED	18,657	N/A	190-70745-605	00146	18,657	N/A	COPA
***	190-70453-601	NLG SHOCK STRUT ASSY	00146	UNLIMITED	18,657	N/A	190-70453-605	00146	18,657	N/A	COPA
***	190-70500-403	MAIN FITTING ASSEMBLY	1171841/001	UNLIMITED	18,657	N/A	190-70500-405	1171841/001	18,657	N/A	COPA
***	190-70455-003	MAIN FITTING	1150414/001	56,000	18,657	37,343	190-70455-003	1150414/001	18,657	37,343	COPA
***	190-70465-401	SLIDING TUBE ASSY	1171876/001	UNLIMITED	18,657	REPLACED	190-70465-403	1231409/001	16,333	N/A	HK4560
***	190-70464-001	SLIDING TUBE	1150409/002	56,000	18,657	REPLACED	190-70464-001	1173054/001	16,333	39,667	HK4560
***	190-70460-001	WHEEL AXLE	1153890/005	56,000	18,657	REPLACED	190-70460-311	1581193/002	0	56,000	NEW
***	190-70470-001	LOWER CAN	1160332/002	56,000	18,657	REPLACED	190-70470-301	1597639/001	18,657	56,000	NEW
***	190-70471-001	UPPER CAN	1150972/006	56,000	18,657	37,343	190-70471-001	1150972/006	18,657	37,343	COPA
***	190-70497-001	DRAG BRACE ATTACH PIN	1160334/009	56,000	18,657	37,343	190-70497-001	1160334/009	18,657	37,343	COPA
***	190-70468-403	UPR TORQUE LINK ASSY	1171855/001	UNLIMITED	18,657	REPLACED	190-70468-403	1170597/001	18,756	N/A	HK4505
***	190-70469-005	UPR TORQUE LINK	AP0543	56,000	18,657	REPLACED	190-70469-005	AP0421	28,756	37,244	HK4505
***	190-70466-401	LWR TORQUE LINK ASSY	1171888/001	UNLIMITED	18,657	REPLACED	190-70466-401	1100130/001	17,565	N/A	N229JB
***	190-70482-003	LWR TORQUE LINK	AP0490	56,000	18,657	REPLACED	190-70482-003	AP0112	17,565	38,435	N229JB
***	170-70476-901	RACK	810551/003	56,000	18,657	37,343	170-70476-901	810551/003	18,657	37,343	COPA
***	170-70480-003	STEERING CYLINDER	1357235/004	82,400	10,511	REPLACED	170-70480-001	1105876/001	17,210	65,190	N248JB
***	170-70480-003	STEERING CYLINDER	1357235/005	82,400	10,511	REPLACED	170-70480-003	1309806/006	8,953	73,447	N197JB
***	190-70495-001	PINTLE LEFT PIN	1134174/017	56,000	18,657	37,343	190-70495-001	1134174/017	18,657	37,343	COPA
***	190-70490-001	PINTLE RIGHT PIN	1150974/004	56,000	18,657	37,343	190-70490-001	1150974/004	18,657	37,343	COPA
***	190-70540-401	STEERING ASSEMBLY	1171891/001	UNLIMITED	18,657	N/A	190-70540-401	1171891/001	18,657	N/A	COPA
***	190-70478-001	STEERING CUFF	1141983/002	56,000	18,657	37,343	190-70478-001	1141983/002	18,657	37,343	COPA
***	170-70475-901	PINION	PTC794753/016	56,000	18,657	37,343	170-70475-901	PTC794753/016	18,657	37,343	COPA

PREPARED BY:	DATE:	JAN 25 2017
VERIFIED BY:	DATE:	JAN 25 2017

SAFE LIFE LIMITS HAVE BEEN REVIEWED AND VERIFIED TO APPROVED AND/OR ACCEPTED DATA.
CUMULATIVE CYCLE INFORMATION FOR EACH LIFE LIMITED COMPONENT OR ASSEMBLY
IS PROVIDED BY THE CUSTOMER. DOCUMENTATION IS RETAINED ON FILE AT THIS REPAIR FACILITY.

LIFE LIMIT PARTS STATUS LIST

Aircraft N982TA (MSN 19000259)

As of: 27/04/2017

NLG SHOCK STRUT ASSY

P/N: 190-70453-005		CSN: 18858		TSN: 21975.93		Installation Date: 25/02/2017							
S/N: 00146		CSO: 1		TSO: 1.82									
ITEM No.	PART DESCRIPTION	PART NUMBER	SERIAL NUMBER	TSN	TSO	CSN	CSO	LIFE LIMIT	CYCLE LIFE REMAINING	OVR LIMIT (CYCLES)	CYCLE LIFE REMAINING	OVR LIMIT (DAYS)	DAYS OVR REMAINING
1	MAIN FITTING	190-70453-003	115044001	21975.93	1.82	18,858	1	50,000	37,342	20,000	19,999	3650	3,589
2	SLIDING TUBE	190-70454-001	117054001	19208.82	1.82	16,354	1	50,000	29,699	20,000	19,999	3650	3,589
3	WHEEL AXLE	190-70460-011	1581193002	1.82	-	-	-	50,000	29,699	20,000	19,999	3650	3,589
4	LOWER CAM	190-70470-001	1597630001	1.82	-	-	-	50,000	29,699	20,000	19,999	3650	3,589
5	UPPER CAM	190-70471-001	1150972008	21975.93	1.82	18,858	1	50,000	37,342	20,000	19,999	3650	3,589
6	DRIFT PIN	190-70497-001	1160334009	21975.93	1.82	18,858	1	50,000	37,342	20,000	19,999	3650	3,589
7	UPPER TORQUE LINK	190-70489-004	AP0421	21905.93	1.82	18,752	1	50,000	37,342	20,000	19,999	3650	3,589
8	LOWER TORQUE LINK	190-70482-003	AP0112	26318.95	1.82	17,569	1	50,000	36,434	20,000	19,999	3650	3,589
9	RACK	170-70478-001	810551003	21975.93	1.82	18,858	1	50,000	37,342	20,000	19,999	3650	3,589
10	STEERING CYLINDER	170-70480-001	1105670001	27655.61	1.82	17,211	1	50,000	35,188	20,000	19,999	3650	3,589
11	STEERING CYLINDER	170-70480-003	1326660008	14060.07	1.82	8,954	1	50,000	73,499	20,000	19,999	3650	3,589
12	LEFT PINTLE PIN	190-70495-001	1134174017	21975.93	1.82	18,858	1	50,000	37,342	20,000	19,999	3650	3,589
13	RIGHT PINTLE PIN	190-70490-001	1150974004	21975.93	1.82	18,858	1	50,000	37,342	20,000	19,999	3650	3,589
14	STEERING CURB	190-70476-001	1141859002	21975.93	1.82	18,858	1	50,000	37,342	20,000	19,999	3650	3,589
15	PINION	170-70475-001	PTC2M783018	21975.93	1.82	18,858	1	50,000	37,342	20,000	19,999	3650	3,589

NLG DRAG BRACE

P/N: 190-70560-403		CSN: 18334		TSN: 19208.82		Installation Date: 25/02/2017							
S/N: 00285		CSO: 1		TSO: 1.82									
ITEM No.	PART DESCRIPTION	PART NUMBER	SERIAL NUMBER	TSN	TSO	CSN	CSO	LIFE LIMIT	CYCLE LIFE REMAINING	OVR LIMIT (CYCLES)	CYCLE LIFE REMAINING	OVR LIMIT (DAYS)	DAYS OVR REMAINING
1	UPPER BRACE	190-70553-005	1209940005	19208.82	1.82	16,354	1	50,000	39,656	20,000	19,999	3650	3,590
2	LOWER BRACE	190-70560-001	1200869004	19208.82	1.82	16,354	1	50,000	39,656	20,000	19,999	3650	3,590
3	MIDDLE AXLE	190-70560-001	1182352013	19208.82	1.82	16,354	1	50,000	39,656	20,000	19,999	3650	3,590
4	PINTLE PIN	190-70555-001	1189174017	19208.82	1.82	16,354	1	50,000	39,656	20,000	19,999	3650	3,590
5	PINTLE PIN	190-70555-001	1189174030	19208.82	1.82	16,354	1	50,000	39,656	20,000	19,999	3650	3,590

NLG LOCKING STAY

P/N: 190-70560-401		CSN: 17348		TSN: 28204.48		Installation Date: 25/02/2017							
S/N: 00085		CSO: 1		TSO: 1.82									
ITEM No.	PART DESCRIPTION	PART NUMBER	SERIAL NUMBER	TSN	TSO	CSN	CSO	LIFE LIMIT	CYCLE LIFE REMAINING	OVR LIMIT (CYCLES)	CYCLE LIFE REMAINING	OVR LIMIT (DAYS)	DAYS OVR REMAINING
1	LOCKING UPPER STAY	170-70556-003	116467001	21975.93	1.82	18,858	1	50,000	37,342	20,000	19,999	3650	3,590
2	LOCKING LOWER STAY	190-70558-003	AP0184	28204.48	1.82	17,348	1	50,000	36,654	20,000	19,999	3650	3,590
3	CARDAN	170-70567-001	1105102010	28204.48	1.82	17,348	1	50,000	36,654	20,000	19,999	3650	3,590

Signature: *[Signature]*
Name: Roberto Castro
Position: AT/VE160 Engineer

Signature: *[Signature]*
Name: Carlos Dominguez
Position: CO MANAGER

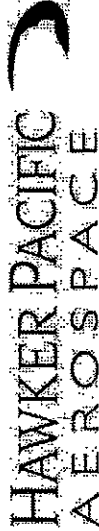
1. Approving Civil Aviation
Authority / Country
FAA / United States

AUTHORIZED RELEASE CERTIFICATE

FAA Form 8130-3, Airworthiness Approval Tag

3. Form Tracking Number:
107312

4. Organization Name
and Address:



Hawker Pacific Aerospace
Repair Station No. RJ3R817L
11240 Sherman Way
Sun Valley, CA. 91352

5. Work Order/Contract/Invoice Number
660009489 / 50308483

6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work
1	CYLINDER, STEERING	170-70480-001	1	1105876/001	OVERHAULED

12. Remarks: Life Details:

CSN: 17210 TSO: ZERO CSO: ZERO

OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-02 REV. 15 DATED 29FEB2016

PREVIOUS OPERATOR: JETBLUE, A/C N249JB

13a. Certifies the items identified above were manufactured in conformity to:

- ☐ Approved design data and are in condition for safe operation.
☐ Non-approved design data specified in Block 12.

13b. Authorized Signature:

13c. Approval / Authorization No.:

13d. Name:

13e. Date:

14a. ☒ 14 CFR 43.9 Return to Service

Other regulation specified in Block 12
Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.

14b. Authorized Signature:



Julio Gonzalez
14d. Name: Julio Gonzalez

14c. Approval Certificate No.:

RJ3R817L

14e. Date:

(dd/mm/yyyy)
25.Jan.2017

USER / INSTALLER RESPONSIBILITIES

Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly.

2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1.

3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

W106399

LIFE LIMIT REPORT

11240 SHERMAN WAY
SUN VALLEY, CA 91352

HAWKER PACIFIC
AEROSPACE

FAA REPAIR STATION
RJ3R817L
PAGE 1 OF 1

REMOVAL

A/C #: HP-1567
POS: NLG
DATE: Oct-16
REASON: OVERHAUL

HPA WO#: 660010101
CUST PO#: Y0007917
CUST P/N: N/A
MFG P/N: 190-70450-403
MFG S/N: 00146

INSTALL

A/C #: N/A
ELIGIBILITY: E190/E195
DATE: Jan-17

E190 NLG ASSEMBLY

SAFE LIFE LIMITS: E190 MRB-1928 REV 10 DATED 28APR2015

AS RECEIVED BY HPA

CUSTOMER ITEM No.	MFG P/N	NOMENCLATURE	MFG S/N	SAFE LIFE LIMITS	CYCLES SINCE NEW	REMAINING SAFE LIFE
***	190-70450-403	NLG SHOCK STRUT	00146	UNLIMITED	18,657	N/A
***	190-70745-401	NLG SHOCK STRUT EQUIP	00146	UNLIMITED	18,657	N/A
***	190-70453-601	NLG SHOCK STRUT ASSY	00146	UNLIMITED	18,657	N/A
***	190-70500-403	MAIN FITTING ASSEMBLY	1171841/001	UNLIMITED	18,657	N/A
***	190-70455-003	MAIN FITTING	1150414/001	56,000	18,657	37,343
***	190-70465-401	SLIDING TUBE ASSY	1171876/001	UNLIMITED	18,657	REPLACED
***	190-70464-001	SLIDING TUBE	1150409/002	56,000	18,657	REPLACED
***	190-70460-001	WHEEL AXLE	1153890/005	56,000	18,657	REPLACED
***	190-70470-001	LOWER C/L	1160332/002	56,000	18,657	REPLACED
***	190-70471-001	UPPER C/L	1150972/006	56,000	18,657	37,343
***	190-70480-003	DRAG BRACE ATTACH PIN	1160334/009	56,000	18,657	37,343
***	190-70468-403	UPR TORQUE LINK ASSY	1171855/001	UNLIMITED	18,657	REPLACED
***	190-70459-005	UPR TORQUE LINK	AP0543	56,000	18,657	REPLACED
***	190-70466-401	LWR TORQUE LINK ASSY	1171388/001	UNLIMITED	18,657	REPLACED
***	190-70482-003	LWR TORQUE LINK	AP0490	56,000	18,657	REPLACED
***	170-70476-901	RACK	810551/003	56,000	18,657	37,343
***	170-70480-003	STEERING CYLINDER	1357235/004	82,400	10,511	REPLACED
***	170-70480-003	STEERING CYLINDER	1357235/005	82,400	10,511	REPLACED
***	190-70495-001	PIN TIE ROD PIN	1134174/017	56,000	18,657	37,343
***	190-70490-001	PIN TIE ROD PIN	1150974/004	56,000	18,657	37,343
***	190-70540-401	STEERING ASSEMBLY	1171891/001	UNLIMITED	18,657	N/A
***	190-70478-001	STEERING CUFF	1141983/002	56,000	18,657	37,343
***	170-70475-901	PINION	PTC794753/016	56,000	18,657	37,343

AS RELEASED BY HPA

MFG P/N	MFG S/N	CYCLES SINCE NEW	REMAINING SAFE LIFE	PREVIOUS OPERATOR
190-70450-403	00146	18,657	N/A	COPA
190-70745-605	00146	18,657	N/A	COPA
190-70453-605	00146	18,657	N/A	COPA
190-70500-405	1171841/001	18,657	N/A	COPA
190-70455-003	1150414/001	18,657	37,343	COPA
190-70465-403	1231409/001	16,333	N/A	HK4560
190-70464-001	1173054/001	16,333	39,667	HK4560
190-70460-311	1581193/002	0	56,000	NEW
190-70470-301	1597639/001	0	56,000	NEW
190-70471-001	1150972/006	18,657	37,343	COPA
190-70497-001	1160334/009	18,657	37,343	COPA
190-70468-403	1170597/001	18,756	N/A	HK4505
190-70469-005	AP0421	18,756	37,244	HK4505
190-70466-401	1100130/001	17,565	N/A	N229JB
190-70482-003	AP0112	17,565	38,435	N229JB
170-70476-901	810551/003	18,657	37,343	COPA
170-70480-001	1105876/001	17,210	65,190	N249JB
170-70480-003	1309806/006	9,953	73,447	N197JB
190-70495-001	1134174/017	31,867	37,343	COPA
190-70490-001	1150974/004	18,657	37,343	COPA
190-70540-401	1171891/001	18,657	N/A	COPA
190-70478-001	1141983/002	18,657	37,343	COPA
170-70475-901	PTC794753/016	18,657	37,343	COPA

PREPARED BY:

DATE:

JAN 25 2017

VERIFIED BY:

DATE:

JAN 25 2017

SAFE LIFE LIMITS HAVE BEEN REVIEWED AND VERIFIED TO APPROVED AND/OR ACCEPTED DATA.
CUMULATIVE CYCLE INFORMATION FOR EACH LIFE LIMITED COMPONENT OR ASSEMBLY
IS PROVIDED BY THE CUSTOMER. DOCUMENTATION IS RETAINED ON FILE AT THIS REPAIR FACILITY.

662901W

P/N Detail Print

Print Date: 9/14/2016 21:52
Page: 1 of 5

jetBlue

■ P/N: 190-70450-403

P/N SIN: 00055

NLG SHOCK STRUT EQUIPPED

Batch: 27721A

Control Items	Description	SCHEDULE	Hours	Cycles	Days	Hours	Cycles	Days	Hours	Cycles	Days	STATUS
15LSV						27753.42	17210	3597	0.00	0	0	
15N						27753.42	17210	3597	0.00	0	0	
SCRAP						27753.42	17210	3597	0.00	14790	0	
32-24-00-501	HOSE LANDING GEAR (NLG) INSTALLATION	32000				22452.18	17210	2945	0.00	2790	655	OPEN
32-40-14-001	HOSE LANDING GEAR (NLG) LSC LIMITED REPLACEMENT AT 2000 FC	32000				20772.33	13057	2736	0.00	0	0	OPEN
32-40-14-001	HOSE LANDING GEAR (NLG) LSC LIMITED REPLACEMENT AT 2000 FC	32000				21157.23	13255	2780	0.00	0	0	N/A
32-40-14-001	HOSE LANDING GEAR (NLG) LSC LIMITED REPLACEMENT AT 2000 FC	32000				23601.00	14672	3102	0.00	0	0	OPEN

■ P/N: 170-70475-001

P/N SIN: 1087762/001

PINION

Batch: 198122

Control Items	Description	SCHEDULE	Hours	Cycles	Days	Hours	Cycles	Days	Hours	Cycles	Days	STATUS
15LSV						27753.42	17210	3597	0.00	0	0	
15N						27753.42	17210	3597	0.00	0	0	
SCRAP						27753.42	17210	3597	0.00	14790	0	

■ P/N: 170-70476-001

P/N SIN: 1107510/001

RACK

Batch: 198076

Control Items	Description	SCHEDULE	Hours	Cycles	Days	Hours	Cycles	Days	Hours	Cycles	Days	STATUS
15LSV						27753.42	17210	3597	0.00	0	0	
15N						27753.42	17210	3597	0.00	0	0	
SCRAP						27753.42	17210	3597	0.00	14790	0	

Anthony Thomas Affirmes
Auditor, Quality Assurance
Technical Operations, JetBlue Airways
09/15/2016

663901M

P/N Detail Print

jetBlue

Print Date: 9/14/2016 21:52
Page: 2 of 5

P/N: 170-70480-001		P/N SIN: 1105875/002		Batch: 198078			
CYLINDER, NLG STEERING							
Control Items	Description	SCHEDULE	Hours	Cycles	Days	Hours	Cycles
SCRAP		82400	27753:42	17210	3597	0:00	65190
ISL5V			27753:42	17210	3597	0:00	0
ISN			27753:42	17210	3597	0:00	0
32-52-11-003	REMOVE AND REPLACE NLG STEERING CYLINDER FOR LIFE UNIT	82400	27746:31	17210	3598	0:00	65190
P/N: 170-70480-001		P/N SIN: 1105876/001		Batch: 198077			
CYLINDER, NLG STEERING							
Control Items	Description	SCHEDULE	Hours	Cycles	Days	Hours	Cycles
ISN			27753:42	17210	3597	0:00	0
SCRAP		82400	27753:42	17210	3597	0:00	65190
ISL5V			27753:42	17210	3597	0:00	0
32-52-11-003	REMOVE AND REPLACE NLG STEERING CYLINDER FOR LIFE UNIT	82400	27746:31	17210	3598	0:00	65190
P/N: 180-70455-003		P/N SIN: 1034711/001		Batch: 197975			
MAIN FITTING							
Control Items	Description	SCHEDULE	Hours	Cycles	Days	Hours	Cycles
ISL5V			27753:42	17210	3597	0:00	0
SCRAP		32000	27753:42	17210	3597	0:00	14790
ISN			27753:42	17210	3597	0:00	0
P/N: 190-70480-001		P/N SIN: 1050424/001		Batch: 198072			
AXLE, WHEEL							
Control Items	Description	SCHEDULE	Hours	Cycles	Days	Hours	Cycles
SCRAP		32000	27753:42	17210	3597	0:00	14790
ISL5V			27753:42	17210	3597	0:00	0
ISN			27753:42	17210	3597	0:00	0

*Anthony Thomas Affinity
Auditor Quality Assurance
Technical Operations JetBlue Airways
09/15/2016*

1. Approving Civil Aviation Authority / Country FAA / United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, Airworthiness Approval Tag		3. Form Tracking Number: 107303	
4. Organization Name and Address: HAWKER PACIFIC AEROSPACE Hawker Pacific Aerospace Repair Station No. RJ3R817L 11240 Sherman Way Sun Valley, CA. 91352		5. Work Order/Contract/Invoice Number 660007394 / 50196617		11. Status/Work OVERHAULED	
6. Item	7. Description	8. Part Number	9. Quantity	10. Serial Number	11. Status/Work
1	CYLINDER, STEERING	170-70480-003	1	1309806/006	OVERHAULED
12. Remarks: Life Details: CSN: 8953 TSO: ZERO CSO: ZERO OVERHAULED IN ACCORDANCE WITH LIEBHERR CMM 32-21-02 REV. 15 DATED 29FEB2016 PREVIOUS OPERATOR: JETBLUE, A/C N197JB					
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in condition for safe operation. ☐ Non-approved design data specified in Block 12.					
13b. Authorized Signature:		13c. Approval / Authorization No.:		14a. ☒ 14 CFR 43.9 Return to Service Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations; part 43 and in respect to that work, the items are approved for return to service.	
13d. Name:		13e. Date:		14b. Authorized Signature: <i>[Signature]</i> 14c. Approval Certificate No.: RJ3R817L	
13d. Name:		13e. Date:		14d. Name: Julio Gonzalez 14e. Date: dd/mm/yyyy 25-Jan-2017	
USER / INSTALLER RESPONSIBILITIES					
Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly. 2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1. 3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.					

(Note: 1). It is important to understand that the existence of the document alone does not automatically constitute authority to install the part/component/assembly.

2) Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the Airworthiness Authority of the country specified in block 1.

3) Statements 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

FAA FORM 8130-3 (02-14)	667	NSN: 0052-00-012-901
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LIFE LIMIT REPORT

11240 SHERMAN WAY
SUN VALLEY, CA 91352

HAWKER PACIFIC
AEROSPACE

FAA REPAIR STATION
RJ3R817L
PAGE 1 OF 1

REMOVAL

A/C #: HP-1567 A/C S/N: 19000174
POS: NLG
DATE: Oct-16 REASON: OVERHAUL

HPA WO#: 660010101

CUST PO#: 70007917
CUST P/N: N/A
MFG P/N: 190-70450-403
MFG S/N: 00146

INSTALL

A/C #: N/A
ELIGIBILITY: E190/E195
DATE: Jan-17

E190 NLG ASSEMBLY

SAFE LIFE LIMITS: E190 MRB-1928 REV 10 DATED 28APR2016

AS RECEIVED BY HPA

CUSTOMER ITEM NO.	MFG P/N	NOMENCLATURE	MFG S/N	SAFE LIFE LIMITS	CYCLES SINCE NEW	REMAINING SAFE LIFE
***	190-70450-403	NLG SHOCK STRUT	00146	UNLIMITED	18,657	N/A
***	190-70745-401	NLG SHOCK STRUT EQUIP	00146	UNLIMITED	18,657	N/A
***	190-70453-601	NLG SHOCK STRUT ASSY	00146	UNLIMITED	18,657	N/A
***	190-70500-403	MAIN FITTING ASSEMBLY	1171841/001	UNLIMITED	18,657	N/A
***	190-70455-003	MAIN FITTING	1150414/001	56,000	18,657	37,343
***	190-70465-401	SLIDING TUBE ASSY	1171876/001	UNLIMITED	18,657	REPLACED
***	190-70464-001	SLIDING TUBE	1150409/002	56,000	18,657	REPLACED
***	190-70460-001	WHEEL AXLE	1153890/005	56,000	18,657	REPLACED
***	190-70470-001	LOWER ARM	1160332/002	56,000	18,657	REPLACED
***	190-70471-001	UPPER ARM	1150972/006	56,000	18,657	37,343
***	190-70497-001	DRAG BRACE ATTACH PIN	1160334/009	56,000	18,657	37,343
***	190-70468-403	UPR TORQUE LINK ASSY	1171855/001	UNLIMITED	18,657	REPLACED
***	190-70469-005	UPR TORQUE LINK	AP0543	56,000	18,657	REPLACED
***	190-70466-401	LWR TORQUE LINK ASSY	1171388/001	UNLIMITED	18,657	REPLACED
***	190-70482-003	LWR TORQUE LINK	AP0490	56,000	18,657	REPLACED
***	170-70476-901	RACK	810551/003	56,000	18,657	37,343
***	170-70480-003	STEERING CYLINDER	1357235/004	82,400	10,511	REPLACED
***	170-70480-003	STEERING CYLINDER	1357235/005	82,400	10,511	REPLACED
***	190-70495-001	PINTLE LEFT PIN	1134174/017	56,000	18,657	37,343
***	190-70490-001	PINTLE RIGHT PIN	1150974/004	56,000	18,657	37,343
***	190-70540-401	STEERING ASSEMBLY	1171891/001	UNLIMITED	18,657	N/A
***	190-70478-001	STEERING CUFF	1141983/002	56,000	18,657	37,343
***	170-70475-901	PINION	PTC794753/016	56,000	18,657	37,343

AS RELEASED BY HPA

MFG P/N	MFG S/N	CYCLES SINCE NEW	REMAINING SAFE LIFE	PREVIOUS OPERATOR
190-70450-403	00146	18,657	N/A	COPA
190-70745-405	00146	18,657	N/A	COPA
190-70453-605	00146	18,657	N/A	COPA
190-70500-405	1171841/001	18,657	N/A	COPA
190-70455-003	1150414/001	18,657	37,343	COPA
190-70465-403	1231409/001	16,333	N/A	HK4560
190-70464-001	1173034/001	16,333	39,667	HK4560
190-70460-311	1581193/002	0	56,000	NEW
190-70470-301	1397639/001	0	56,000	NEW
190-70471-001	1150972/006	18,657	37,343	COPA
190-70497-001	1160334/009	18,657	37,343	COPA
190-70468-403	1170597/001	18,756	N/A	HK4505
190-70469-005	AP0421	18,756	37,244	HK4505
190-70466-401	1100130/001	17,565	N/A	N229JB
190-70482-003	AP0112	17,565	38,435	N229JB
170-70476-901	810551/003	18,657	37,343	COPA
170-70480-001	1105876/001	17,210	65,190	N249JB
170-70480-003	1309806/006	8,953	73,447	N197JB
190-70495-001	1134174/017	18,657	37,343	COPA
190-70490-001	1150974/004	18,657	37,343	COPA
190-70540-401	1171891/001	18,657	N/A	COPA
190-70478-001	1141983/002	18,657	37,343	COPA
170-70475-901	PTC794753/016	18,657	37,343	COPA

PREPARED BY:

DATE:

JAN 25 2017

VERIFIED BY:

DATE:

JAN 25 2017

SAFE LIFE LIMITS HAVE BEEN REVIEWED AND VERIFIED TO APPROVED AND/OR ACCEPTED DATA.
CUMULATIVE CYCLE INFORMATION FOR EACH LIFE LIMITED COMPONENT OR ASSEMBLY
IS PROVIDED BY THE CUSTOMER. DOCUMENTATION IS RETAINED ON FILE AT THIS REPAIR FACILITY.



December 22, 2015

To Whom It May Concern

Dear Sirs:

JetBlue Airways hereby certifies that the Gear and Shock Strut arrangements, listed below were installed on **February 07, 2006** and removed from JetBlue Airways aircraft MSN 190 00020 on **December 09, 2015**:

NLG Shock Strut	PN 190-70450-403	SN 00020
Drag Brace	PN 190-70550-403	SN 00030
Locking Stay	PN 190-70650-401	SN 00033
Strut Main Landing Gear, LH	PN 2821A0000-03	SN 00127
LH Side Stay	PN 190-70150-403	SN 00044
Locking Stay	PN 190-70250-407	SN 00066
Strut Main Landing Gear, RH	PN 2822A0000-03	SN 05127
RH Side Stay	PN 190-70150-404	SN 00033
Locking Stay	PN 190-70250-407	SN 00067

It is further certified that to the best of our knowledge the aircraft from which this part was removed, while in the possession of JetBlue Airways, was not involved in any major incident or accident, and was not subject to severe stress, damage or major defects.

During this period, **17,155** cycles and **27,443:57** hours was accumulated on the part/aircraft combination during service with JetBlue Airways.

Sincerely,

Anthony Thomas
Auditor, Quality Assurance
JetBlue Airways

11240 SHERMAN WAY
SUN VALLEY, CA 91352

LIFE LIMIT REPORT

FAA REPAIR STATION
R3R817L
PAGE 1 OF 1

REMOVAL

A/C #: N1973B A/C S/N: 1900020
POS: NLG
DATE: Dec-15 REASON: OVERHAUL

HPA W/D #: 660007394
CUST PO #: R01791971
CUST P/N: N/A
MEG P/N: 190-70450-403
MEG S/N: 00020

INSTALL
A/C #: N/A
ELIGIBILITY: E190-100IGW
DATE: Feb-16

SAFE LIFE LIMITS: E190 NR-6 (92) TABLE 1 REV B DATED 23E82015

E190 NLG ASSEMBLY

AS RECEIVED BY HPA						
CUSTOMER ITEM NO.	MSG P/N	DESCRIPTION	MSG S/N	SAFE LIFE LIMITS	CYCLES SINCE NEW	REMAINING SAFE LIFE
***	190-70450-403	NLG SHOCK STRUT	00020	UNLIMITED	17,155	N/A
***	190-70450-401	NLG SHOCK STRUT EQUIP	00020	UNLIMITED	17,155	N/A
***	190-70453-401	NLG SHOCK STRUT ASST	00020	UNLIMITED	17,155	N/A
***	190-70500-403	MAIN FITTING ASSEMBLY	1095214/001	UNLIMITED	17,155	REPLACED
***	190-70455-003	MAIN FITTING	1074012/001	32,000	17,155	REPLACED
***	190-70465-401	SLIDING TUBE ASST	1092396/001	UNLIMITED	17,155	REPLACED
***	190-70464-001	SLIDING TUBE	1057397/002	32,000	17,155	REPLACED
***	190-70467-001	WHEEL AXLE	1068185/001	32,000	17,155	REPLACED
***	190-70470-001	LOWER CAM	1074402/002	32,000	17,155	REPLACED
***	190-70471-001	UPPER CAM	1069193/002	32,000	17,155	14,845
***	190-70497-001	DRAG BRACE ATTACH PIN	1072096/001	32,000	17,155	14,845
***	190-70468-403	UPR TORQUE LINK ASST	1052531/001	UNLIMITED	17,155	N/A
***	190-70469-005	UPR TORQUE LINK	1050995	32,000	17,155	14,845
***	190-70466-401	UPR TORQUE LINK ASST	1092220/001	UNLIMITED	17,155	N/A
***	190-70462-003	UPR TORQUE LINK	1050109	32,000	17,155	14,845
***	170-70476-001	RACK	1086022/001	32,000	17,155	REPLACED
***	170-70480-003	STEERING CYLINDER	1139266/003	82,400	8,951	REPLACED
***	170-70480-003	STEERING CYLINDER	1139266/005	82,400	8,951	REPLACED
***	190-70495-001	PISTON LEFT PIN	1069002/003	32,000	17,155	14,845
***	190-70490-001	PISTON RIGHT PIN	1077100/002	32,000	17,155	14,845
***	190-70500-401	STEERING ASSEMBLY	1092211/001	UNLIMITED	17,155	N/A
***	190-70470-001	STEERING CLIF	1078588/002	32,000	17,155	14,845
***	170-70475-001	PISTON	1064650/001	32,000	17,155	14,845

AS RELEASED BY HPA				
MSG P/N	MSG S/N	CYCLES SINCE NEW	REMAINING SAFE LIFE	PREVIOUS OPERATOR
190-70450-403	00020	17,155	N/A	JETBLUE
190-70453-405	00020	17,155	N/A	JETBLUE
190-70455-003	00020	17,155	N/A	JETBLUE
190-70500-405	1104527/001	16,417	N/A	N2061B
190-70455-003	1074812/001	16,417	15,563	N2061B
190-70465-403	1112132/001	16,417	N/A	N2312B
190-70464-001	1086233/001	16,417	15,506	N2312B
190-70460-307	1565381/001	0	32,000	NEW
190-70470-301	1565381/003	0	32,000	NEW
190-70471-001	1069193/002	17,155	14,845	JETBLUE
190-70497-001	1072096/001	17,155	14,845	JETBLUE
190-70468-403	1052531/001	17,155	N/A	JETBLUE
190-70469-005	1050995	17,155	14,845	JETBLUE
190-70466-401	1092220/001	17,155	N/A	JETBLUE
190-70462-003	1050109	17,155	14,845	JETBLUE
170-70476-001	1103453/002	16,417	15,511	N2472B
170-70480-003	1139266/002	6,009	76,391	HP-1540CHP
170-70480-001	1139266/005	11,121	76,391	C-FINAW
190-70495-001	1069002/003	17,155	14,845	JETBLUE
190-70490-001	1077100/002	17,155	14,845	JETBLUE
190-70500-401	1092211/001	17,155	N/A	JETBLUE
190-70470-001	1078588/002	17,155	14,845	JETBLUE
170-70475-001	1064650/001	17,155	14,845	JETBLUE

PREPARED BY

DATE: FEB 11 2016

VERIFIED BY

DATE: FEB 11 2016

SAFE LIFE LIMITS HAVE BEEN REVIEWED AND VERIFIED TO APPROVED AND/OR ACCEPTED DATA
CONSULTATIVE CYCLE INFORMATION FOR EACH LIFE LIMITED COMPONENT OR ASSEMBLY
IS PROVIDED BY THE CUSTOMER. DOCUMENTATION IS RETAINED ON FILE AT THIS REPAIR FACILITY.

Control Items	Description	SCHEDULE		ACTUAL		REMAINING		STATUS	
		Hours	Cycles	Days	Hours	Cycles	Days	Hours	Cycles
TSN		27443:57	17155	3591	06/27/2008	0:00	0	0	0
SCRAP		27443:57	17155	3591	06/27/2008	0:00	14845	0	
TSLSV		27443:57	17155		06/27/2008	0:00	0		
E180NLG-CHANGE-OFF	NOSE LANDING GEAR (NLG) REMOVAL	22223:58	13682	2878	01/22/2008	0:00	0	0	OPEN
32-21-00-001	NOSE LANDING GEAR (NLG)	21007:57	17155	2721	06/27/2008	0:00	2845	879	OPEN
E180NLG-CHANGE-ON	NOSE LANDING GEAR (NLG) INSTALLATION	19330:01	12103	2512	01/22/2009	0:00	0	0	OPEN
32-00-11-001	NOSE LANDING GEAR (NLG) LIFE LIMITED REPLACEMENT AT 32550 FC	18734:08	12310	2556	12/09/2008				N/A
PIN: 170-70475-001		PINION		Batch: 195466					
Control Items	Description	SCHEDULE		ACTUAL		REMAINING		STATUS	
TSLSV		27443:57	17155	3591	06/27/2008	0:00	0		
SCRAP		27443:57	17155	3591	06/27/2008	0:00	14845	0	
TSN		27443:57	17155	3591	06/27/2008	0:00	0	0	
PIN: 170-70476-001		RACK		Batch: 195411					
Control Items	Description	SCHEDULE		ACTUAL		REMAINING		STATUS	
SCRAP		27443:57	17155	3591	06/27/2008	0:00	14845	0	
TSN		27443:57	17155	3591	06/27/2008	0:00	0	0	
TSLSV		27443:57	17155		06/27/2008	0:00	0		

ANTHONY THOMAS T. HARRIS

TSN: 170-70475-001

32000
ANTHONY THOMAS - ~~AP~~
Supervisor Quality Assurance
Technical Operations
Jef Blue 4/27/2017

P/N Detail Print

jetBlue

P/N: 170-70480-003		P/N SIN: 1309806/006	CYLINDER, NLG STEERING		Batch: 1809793	
Control Items	Description		SCHEDULE	ACTUAL	REMAINING	STATUS
TSN			Hours Cycles Days Date	Hours Cycles Days	Hours Cycles Days	
SCRAP			14058:15 8953 1823 0	14058:15 8953 1823 0	0 0 0	
TSLSV			14058:15 8953 1823 0	14058:15 8953 1823 0	0 0 0	
32-52-J1-003-A	REMOVE AND REPLACE NLG STEERING CYLINDER FOR LIFE UNIT		14058:15 8953 1823 0	14058:15 8953 1823 0	0 0 0	OPEN
P/N: 170-70480-003		P/N SIN: 1339256/003	CYLINDER, NLG STEERING		Batch: 1804243	
Control Items	Description		SCHEDULE	ACTUAL	REMAINING	STATUS
TSN			Hours Cycles Days Date	Hours Cycles Days	Hours Cycles Days	
SCRAP			14058:15 8953 1823 0	14058:15 8953 1823 0	0 0 0	
TSLSV			14058:15 8953 1823 0	14058:15 8953 1823 0	0 0 0	
32-52-J1-003-A	REMOVE AND REPLACE NLG STEERING CYLINDER FOR LIFE UNIT		14058:15 8953 1823 0	14058:15 8953 1823 0	0 0 0	OPEN
P/N: 190-70465-003		P/N SIN: 1074812/001	MAIN FITTING ASSEMBLY		Batch: 195324	
Control Items	Description		SCHEDULE	ACTUAL	REMAINING	STATUS
TSLSV			Hours Cycles Days Date	Hours Cycles Days	Hours Cycles Days	
TSN			27443:57 17155 3591 0	27443:57 17155 3591 0	0 0 0	
SCRAP			27443:57 17155 3591 0	27443:57 17155 3591 0	0 0 0	
P/N: 190-70460-001		P/N SIN: 1069185/001	AXLE, WHEEL		Batch: 195407	
Control Items	Description		SCHEDULE	ACTUAL	REMAINING	STATUS
SCRAP			Hours Cycles Days Date	Hours Cycles Days	Hours Cycles Days	
TSLSV			27443:57 17155 3591 0	27443:57 17155 3591 0	0 0 0	
TSN			27443:57 17155 3591 0	27443:57 17155 3591 0	0 0 0	

Anthony Thomas
Supervisor, Quality Assurance
Technical Operations
JetBlue 4/24/2017



ENGINEERING LOG CARD

① MANUFACTURER APPROVAL2. REMARKS

③ EQUIPMENT INSTALLATION AND REMOVAL DATA

④ ENGINEERING CHANGES (SB, AD, STC, etc.)

⑤ MAINTENANCE, REPAIR AND OVERHAUL

[illegible]

⑥ CONTROLLED COMPONENTS FITTED

CONTROLLED COMPONENT IDENTIFICATION (AS PER NEW)		LIFE USED AT FITTING		LIFE USED AT REMOVAL		PROCURABLE ITEMS (AS PER CMR)		SERIAL NUMBER
PART NUMBER	SERIAL NUMBER	DESCRIPTION	DATE	CYCLES	COMPONENT CYCLES SINCE NEW	DATE	CYCLES	
170-70486-003	1150528/012	PIN RA ATT	JUL18/07	0	0			1150528/012
190-70455-003	1150414/001	MAIN FITTING NLG	JUL18/07	0	0			1171841/001
190-70464-001	1150409/002	TUBE SLING	JUL18/07	0	0			1171876/001
190-70460-001	1153890/005	AXLE WHEEL	JUL18/07	0	0			1153890/005
190-70471-001	1150872/006	CAM UPPER	JUL18/07	0	0			1150972/006
190-70475-001	1141983/002	GUFF STEERING	JUL18/07	0	0			1171891/001
170-70475-001	PTC7847/83-016	PINION	JUL18/07	0	0			1171891/001
170-70476-001	PTC810581/003	RACK	JUL18/07	0	0			PTC810581/003
170-70480-001	1142835/003	CYLINDER STEERING	JUL18/07	0	0			1142835/003
170-70480-001	1142935/004	CYLINDER STEERING	JUL18/07	0	0			1142935/004
190-70482-003	AP 0480	TORQUE LINK LOWER	JUL18/07	0	0			1171388/001
190-70485-001	1134174/017	PIN PINTLE LEFT	JUL18/07	0	0			1134174/017
190-70490-001	1180874/004	PIN PINTLE RIGHT	JUL18/07	0	0			1150874/004
190-70497-001	1180334/008	PIN DB ATT	JUL18/07	0	0			1180334/008
190-70499-005	AP 0543	TORQUE LINK UPPER	JUL18/07	0	0			1171855/001
190-70470-001	1180332/002	CAM LOWER	JUL18/07	0	0			1180332/002
190-70469-001	1173054/001	Sliding Tube	Jan 26/17	18,657	18,657			1173054/001
190-70460-001	1581193/002	Wheel Axle	Jan 26/17	18,657	18,657			1581193/002
190-70470-001	1597639/001	Lower Cam	Jan 26/17	18,657	18,657			1597639/001
190-70469-003	AP 0421	Upper Torque Link	Jan 26/17	18,657	18,657			1170597/001
190-70482-003	AP 0112	Low Torque Link	Jan 26/17	18,657	18,657			1100130/001
170-70486-001	1105876/001	Steering Cylinder	Jan 26/17	18,657	18,657			1105876/001
170-70480-001	1305806/006	Steering Cylinder	Jan 26/17	18,657	18,657			1305806/006
190-70485-001	115563	Pin Pintle Left	04/Jan/18	22578	22578			115563

IF NECESSARY, ATTACH ADDITIONAL SHEETS.