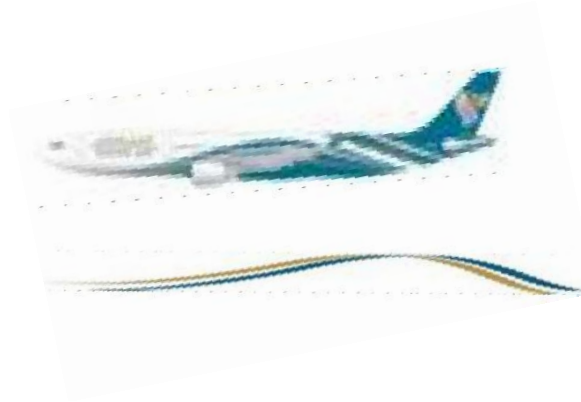


AWCE

Aviation Warranty Consultancy
& Claiming Experts



Agenda

- Warranty Definition
- What is covered by Warranty
- Standard Warranty
- Standard Warranty Period
- Extended Warranties
- Manufacturer Warranty-Exclusions
- Warranty Claim Process
- Oman Air Current Warranty Practice
- Recommendations

Warranty Definition

- An agreement between a buyer and a seller of goods or services, detailing the conditions under which the seller will make repairs or fix problems without cost to the buyer.
- A warranty describes the conditions and period during which the producer or vendor will repair, replace, or compensate for, the defective item without cost to the buyer or user.

Standard Warranty

Each aircraft and all warranted parts shall be free from defects:

- In material
- In workmanship
- In design, having regard to the state of the art at the date of design
- Arising from failure to conform to the specification

Standard Warranty Periods

- Aircraft –Standard Warranty for Airbus is 36 Months.
- Aircraft –Standard Warranty for Boeing is 48 Months.
- Vendors- In the range of three to five years depending on the vendor

Extended Warranties

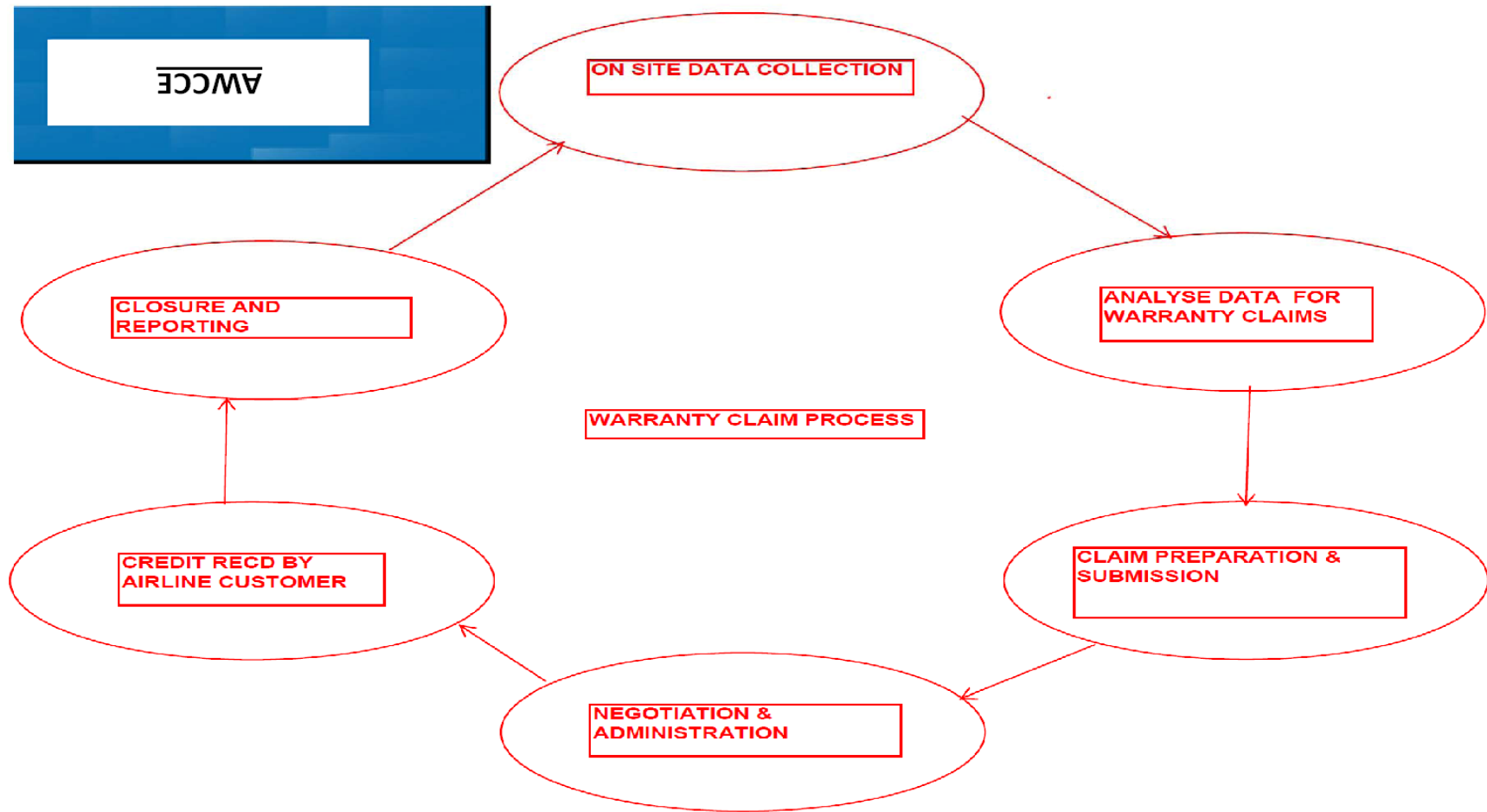
Aircraft manufacturers provide a 12 year service life policy

- **Service Life Policy (SLP)** is applicable to a selected list of items of primary aircraft structure and provides a cost sharing that varies over a period of time.
- **Remedies (Material costs only) A pro-rata** formula gives the credit to be applied under this policy. This formula takes into account the partial use already made by the relevant part over the agreed duration . Within the duration of the standard warranty, 100 percent coverage is applied.

Manufacturer Warranty-Exclusions

- Buyer furnished equipment (BFE) which is equipment fitted that has been purchased by the Customer according to their specific needs. ***(Warranty coverage is negotiated by direct contracts with the relevant suppliers;).***
- Propulsion System as this coverage is provided directly by the Engine Manufacturer selected by the Customer.
- All Supplier Furnished Equipment (SFE) are covered by the transfer of Vendor warranties (PSAA).

Warranty Claim Process Plan



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ON SITE DATA COLLECTION

**ANALYSE DATA FOR
WARRANTY CLAIMS**

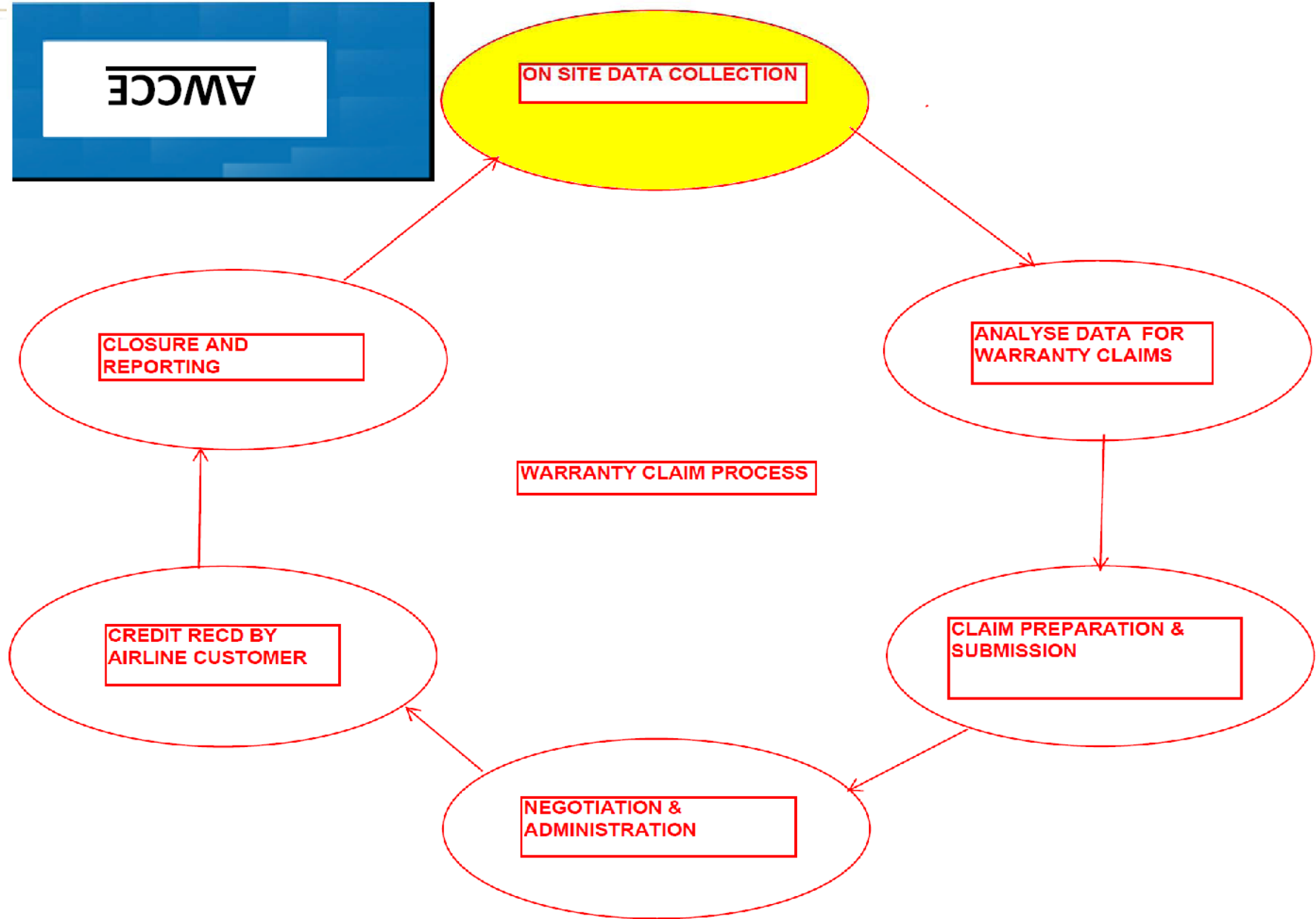
**CLAIM PREPARATION &
SUBMISSION**

WARRANTY CLAIM PROCESS

**NEGOTIATION &
ADMINISTRATION**

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AIRLINE CUSTOMER**

**CLOSURE AND
REPORTING**



On site Data collection

1. Aircraft, Engine, BFE Installation Warranty Includes SB's and Modifications are captured by adding a statement in the Engineering Order to forward the accomplishment job cards to Warranty officer , or and Excel sheet list provided by planning during C-check.
2. The unscheduled component removals declared unserviceable are captured by monitoring the log book entries & the PMI on weekly basis across the fleet.
3. All non routine cards provided by tech records are captured in the PMI and receive hard copies during C-check.

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ON SITE DATA COLLECTION

**CLOSURE AND
REPORTING**

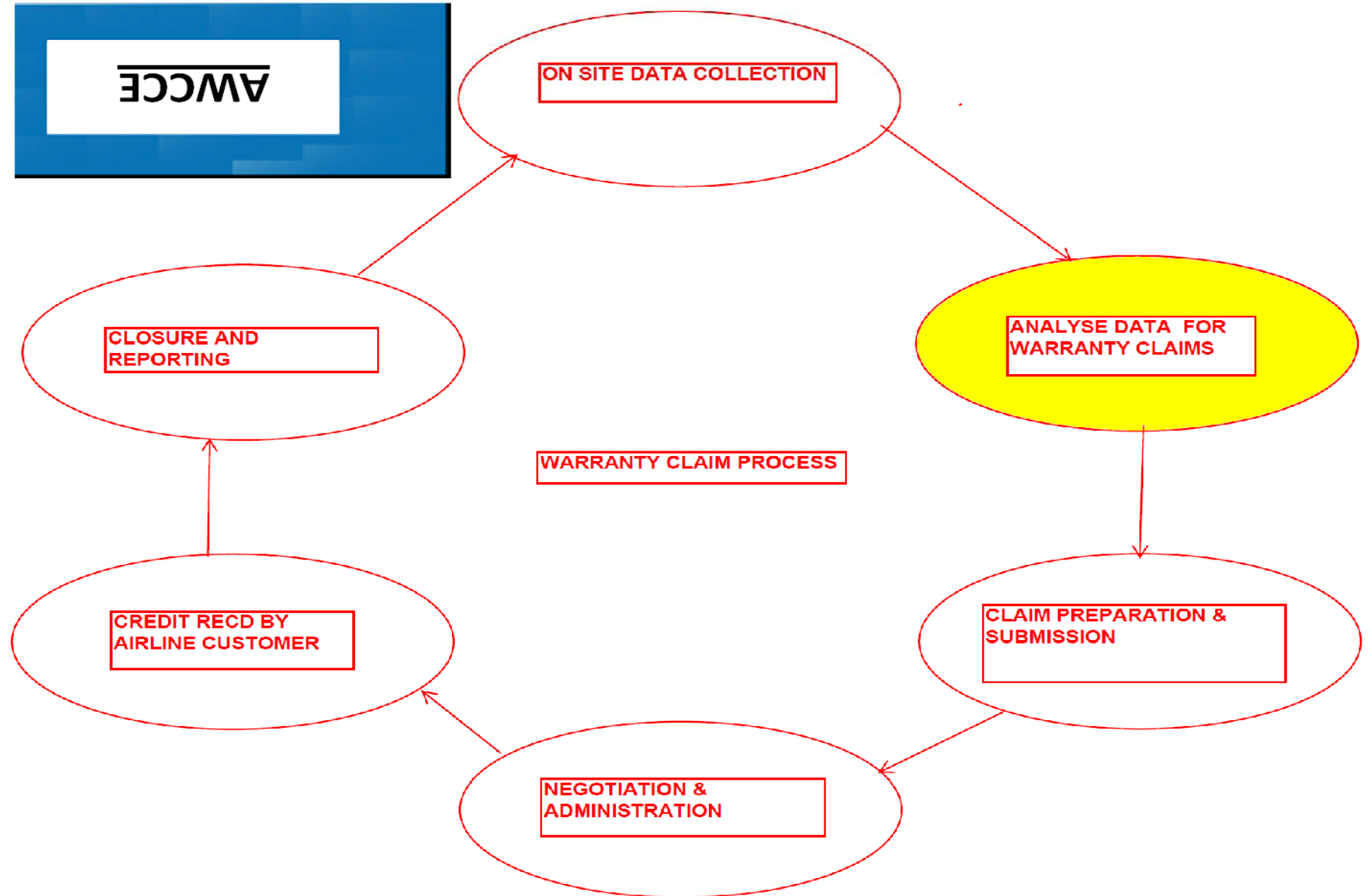
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ADMINISTRATION**



Analyze Data for Warranty Claim

Based on Contractual documents

Warranty cover is assured by:

- The Aircraft Purchase Agreement (PA)
- The Letter Agreements and Amendments to the PA
- Commitment Letter
- Warranties and Service Life Policy (SLP)

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Claim Preparation

Airbus	Boeing	Vendors
<p>Claim to be submitted within 120 days of discovering the defect</p> <ul style="list-style-type: none"> •Warranty Officer must collect: <ol style="list-style-type: none"> a) description of defect b) date defect detected c) part description d) p/no, s/no e) position f) TT, TSLSV, aircraft MSN g) A/C TT, Cycles h) Claim number/date/Delivery date of part to Buyer •Warranty Officer must collect from materials: <ol style="list-style-type: none"> a) Purchase Order b) Unit Price c) Qty d) Invoice •Warranty Officer must collect from planning /Base: <ol style="list-style-type: none"> a)Labor hours 	<p>The defect must be discovered during the warranty period, and Boeing must receive written notice of discovery no later than 180 days of discovering the defect or 90 days after expiration of the warranty period.</p> <ul style="list-style-type: none"> •Warranty Officer must collect : <ol style="list-style-type: none"> a) description of defect b) date defect detected c) part description d) p/no, s/no e) Claim number/date/Delivery date of part to Buyer •Warranty Officer must collect from material: <ol style="list-style-type: none"> a) Purchase Order b) Unit Price c) Qty d) Invoice •Warranty Officer must collect from planning /Base: <ol style="list-style-type: none"> a)Labor hours 	<p>Varies based on the vendor, Claim to be submitted within 120 days of discovering the defect</p> <ul style="list-style-type: none"> •Warranty Officer must collect: <ol style="list-style-type: none"> a) description of defect b) date defect detected c) part description d) p/no, s/no e) position f) TSLSV g)Claim number/date/Delivery date of part to Buyer •Warranty Officer must collect from material: <ol style="list-style-type: none"> a) Purchase Order b) Unit Price c) Qty d) Invoice •Warranty Officer must collect from planning /Base: <ol style="list-style-type: none"> a)Labor hours

Submission

- After all the data collected for warranty claim, warranty officer should go to my Boeing fleet and/or Airbus world website to raise a claim.
- Suppliers claims are also done through my Boeing fleet and/or Airbus world.

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ON SITE DATA COLLECTION

**ANALYSE DATA FOR
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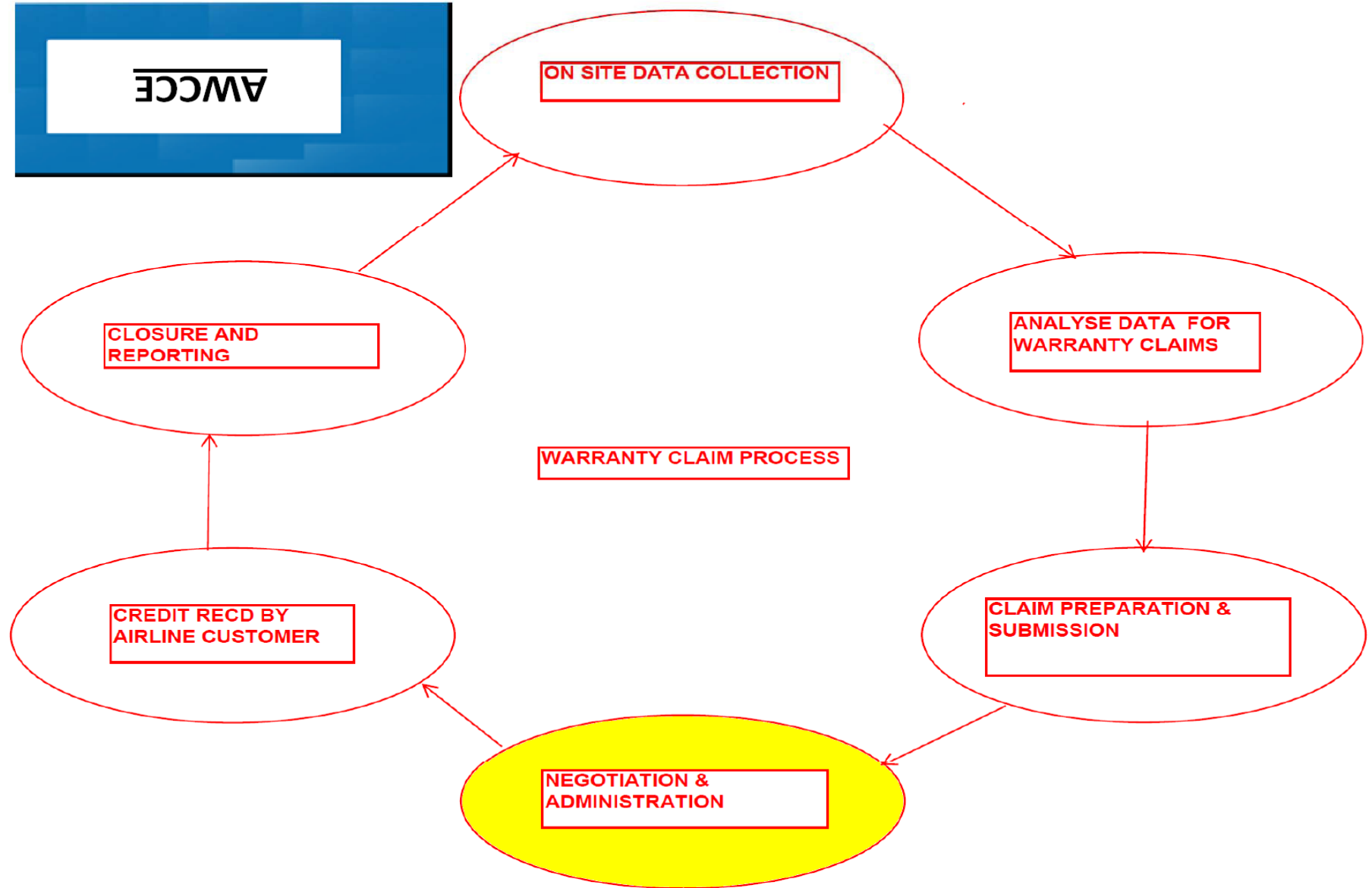
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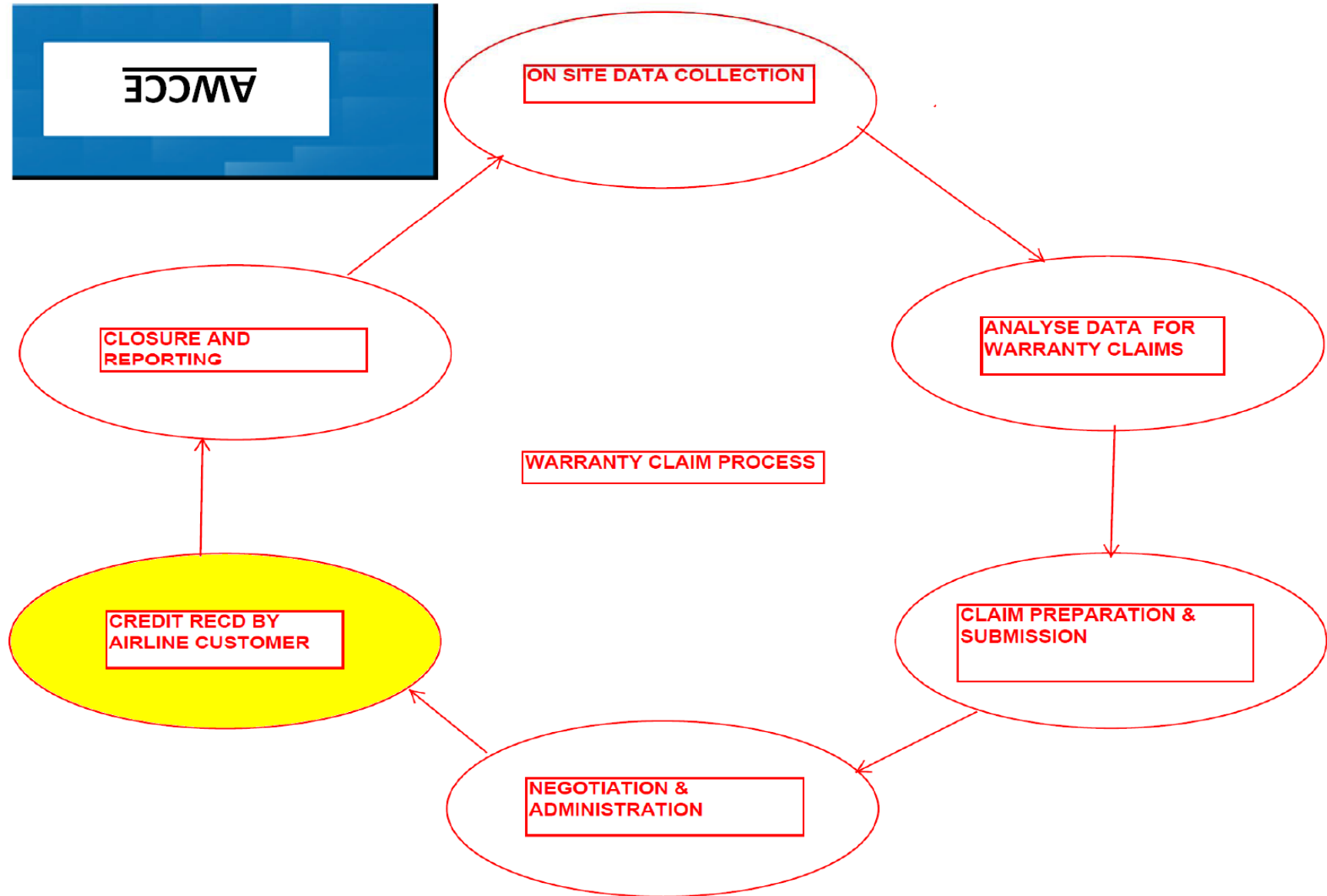
WARRANTY CLAIM PROCESS

**CLAIM PREPARATION &
SUBMISSION**



**NEGOTIATION &
ADMINISTRATION**

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Credit recd by Airline Customer

Airbus	Boeing	Vendors																																																										
<div>CLAIM DISPOSITION NOTICE</div> <div>CDN NR : 32OMA/0004-00 DATE : 28 MAY 2010</div> <div>AIRBUS</div> <div>TO : OMA Mr Fahad Hamood AL-RAWAHI, Dev. Engineer - Wty. fahadh@omanair.aero</div> <div>CC : OMA Mr Dag Jayasuriya, Sr Mgr Tech Contract Dag.Jayasuriya@omanair.com</div> <div>CC : OMA Mr Waheed AL AUFI, Assist Mgr Tech Contract Waheed.AIAufi@omanair.com</div> <div>CC : (OMAMCT@AIRBUS.COM)</div> <div>CC : Stephane COPIN SC2, (stephane.copin@airbus.com)</div> <div>REQUESTOR : OMA CLAIM REF : WYIA/10/001 I/O : 562522</div> <div>OPERATOR : OMA TRACKING NR :</div> <div>A/C TYPE : A330</div> <div>MSN : 1044</div> <div>SUBJECT : PIN F5757416220400 CAP</div> <div>VENDOR : ATA : 57 S/N :</div> <table><tr><th>LABOR</th><th>QTY</th><th>M/H</th><th>TOTAL M/H</th><th>Rate</th><th>%</th></tr><tr><td>as per work performed by OMA on LH#5 & RH#2 FLAP FAIRING ACCESS DOOR on MSN 1044.</td><td>1</td><td>2.00</td><td>2.00</td><td>62.81</td><td>100</td></tr><tr><td colspan="4">LABOR TOTAL : USD</td><td>125.62</td><td></td></tr></table> <div>OTHER</div> <div>Various Materials: Caps, Covers.</div> <div>OTHER TOTAL : USD 629.00</div> <div>SETTLEMENT: C Credit ACCNT: OMA CDN TOTAL : USD 754.62</div> <div>Dear Fahad,</div> <div>= Your Request:</div> <div>- Reference is made to your above mentioned warranty claim for labor and material credit for the work performed by Oman Air on A330 MSN 1044 - ON LH#5 & RH#2 FLAP FAIRING ACCESS DOOR.</div> <div>= Our Answer:</div> <div>- We are pleased to inform you that your claim has been settled in your favor.</div> <div>The amount shown under total will be credited to Oman Air Goods and Services account with Airbus.</div> <div>With my Best Regards,</div> <div>PATRICK LOMBARD, Warranty, Services and Customer Support.</div> <div>Tel : (33)667192219 Fax : (33)661934049 Tlx : 530526 Sita : TLSBY7X</div> <div>PATRICK.LOMBARD@airbus.com</div>	LABOR	QTY	M/H	TOTAL M/H	Rate	%	as per work performed by OMA on LH#5 & RH#2 FLAP FAIRING ACCESS DOOR on MSN 1044.	1	2.00	2.00	62.81	100	LABOR TOTAL : USD				125.62		<div> BOEING</div> <div>Facsimile Message</div> <div>To: Oman Air</div> <div>Attention: Fahad Al-Rawahi fahadh@omanair.aero</div> <div>September 1, 2009</div> <div>6-1151-MAO-13724</div> <div>Subject: Service Bulletin 737-49-1133</div> <div>References: (a) Oman Air Claim No. WYVW/09/034</div> <div>(b) Boeing Claim No. 2009H0343</div> <div>In reply please refer to Boeing Claim No. 2009H0343</div> <div>Dear Fahad,</div> <div>Thank you for the reference (a) claim. Our review of your request is complete. Based upon the information provided, we are agreeable to providing credit in the amount of USD 1,818.00 for the incorporation of the subject modification on airplane YA366, YC171 and YJ901.</div> <div>This credit represents reimbursement of 10.0 M/H Each x USD 60.60.</div> <div>This amount reflects M/Hs commensurate with subject service bulletin rev. 02 estimates.</div> <div>Please advise if we can provide any additional information on this matter.</div> <div>Best Regards,</div> <div></div> <div>Marilyn A. Olsen</div> <div>Warranty Analyst for</div> <div>Mark W. Bailey</div> <div>Regional Manager</div> <div>BCA Warranty & Product Assurance Contracts</div> <div>Phone: (206) 766-4213</div> <div>Fax: (425) 237-1706</div> <div>We would appreciate your feedback regarding warranty claim administration.</div> <div>Please use the following link and complete a brief survey. Thank you.</div> <div>https://www.myboeingfleet.com/claims/survey.asp</div>	<div>Honeywell</div> <div>Engines & Systems</div> <div>1944 E. Sky Harbor Circle</div> <div>PO Box 29003</div> <div>Phoenix, AZ 85038-9003</div> <div>CREDIT MEMO</div> <div>Oman Air</div> <div>Attn:</div> <div>Suleiman Al-Baluchi</div> <div>Muscat International Airport</div> <div>PO Box 58, PC 111,</div> <div>Sultanate of Oman</div> <div>Credit Memo Date: 28BMF2XM</div> <div>Claim Number: 1001/2008</div> <div>5156442</div> <div>To apply credit or request a refund, contact Credit & Mary Ann Moya (480) 592-3841</div> <div>Treasury Services at (602) 365-2617 or maryann.moya@honeywell.com</div> <table><tr><th>CUSTOMER CODE:</th><th>O0533</th><th>SERVICE CENTER INVOICE:</th><th>WYVW/07/033</th><th>ORIGINAL CLAIM:</th></tr><tr><th>PRODUCTS:</th><td>GTCP131-9B</td><th>AMOUNT REQUESTED</th><th>AMOUNT APPROVED</th><td></td></tr><tr><td>New</td><td></td><td>0.00</td><td>0.00</td><td></td></tr><tr><td>T&M</td><td></td><td>0.00</td><td>0.00</td><td></td></tr><tr><td>Exchange</td><td></td><td>0.00</td><td>0.00</td><td></td></tr><tr><td>Rework</td><td></td><td>4,306.50</td><td>0.00</td><td></td></tr><tr><td>Others</td><td></td><td>75.32</td><td>75.32</td><td></td></tr><tr><td>TOTAL AMOUNT</td><td></td><td>4,410.32</td><td>103.82</td><td></td></tr></table> <div>NOTES:</div> <div>Claim Submitted By: Fahad Al-Rawahi</div> <div>R&R labor and freight reimbursement apply per the Boeing PSAA when New Unit Warranty is accepted on units removed and returned to an authorized Honeywell repair facility. Please note the individual disposition as follows:</div> <div>PN 692546-4 SN 04537 was originally delivered on B737 aircraft A40-88 on May/07/2007, and removed with TSN of 1041hrs. Part was sent to GMBH who in turn sent it to PHX against RO # 625904; new unit warranty was at first denied, but then accepted so part was repaired at no charge. Therefore, the reimbursement for the repair cost of \$4306.50 is denied. The balance of 0.5hrs for R&R is acceptable at \$57/hr for a 2007 removal, plus the requested freight cost of \$75.32.</div> <div>Run Time: 17:24:11</div> <div>Page 1 of 1</div>	CUSTOMER CODE:	O0533	SERVICE CENTER INVOICE:	WYVW/07/033	ORIGINAL CLAIM:	PRODUCTS:	GTCP131-9B	AMOUNT REQUESTED	AMOUNT APPROVED		New		0.00	0.00		T&M		0.00	0.00		Exchange		0.00	0.00		Rework		4,306.50	0.00		Others		75.32	75.32		TOTAL AMOUNT		4,410.32	103.82	
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18

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ON SITE DATA COLLECTION

**CLOSURE AND
REPORTING**

**ANALYSE DATA FOR
WARRANTY CLAIMS**

WARRANTY CLAIM PROCESS

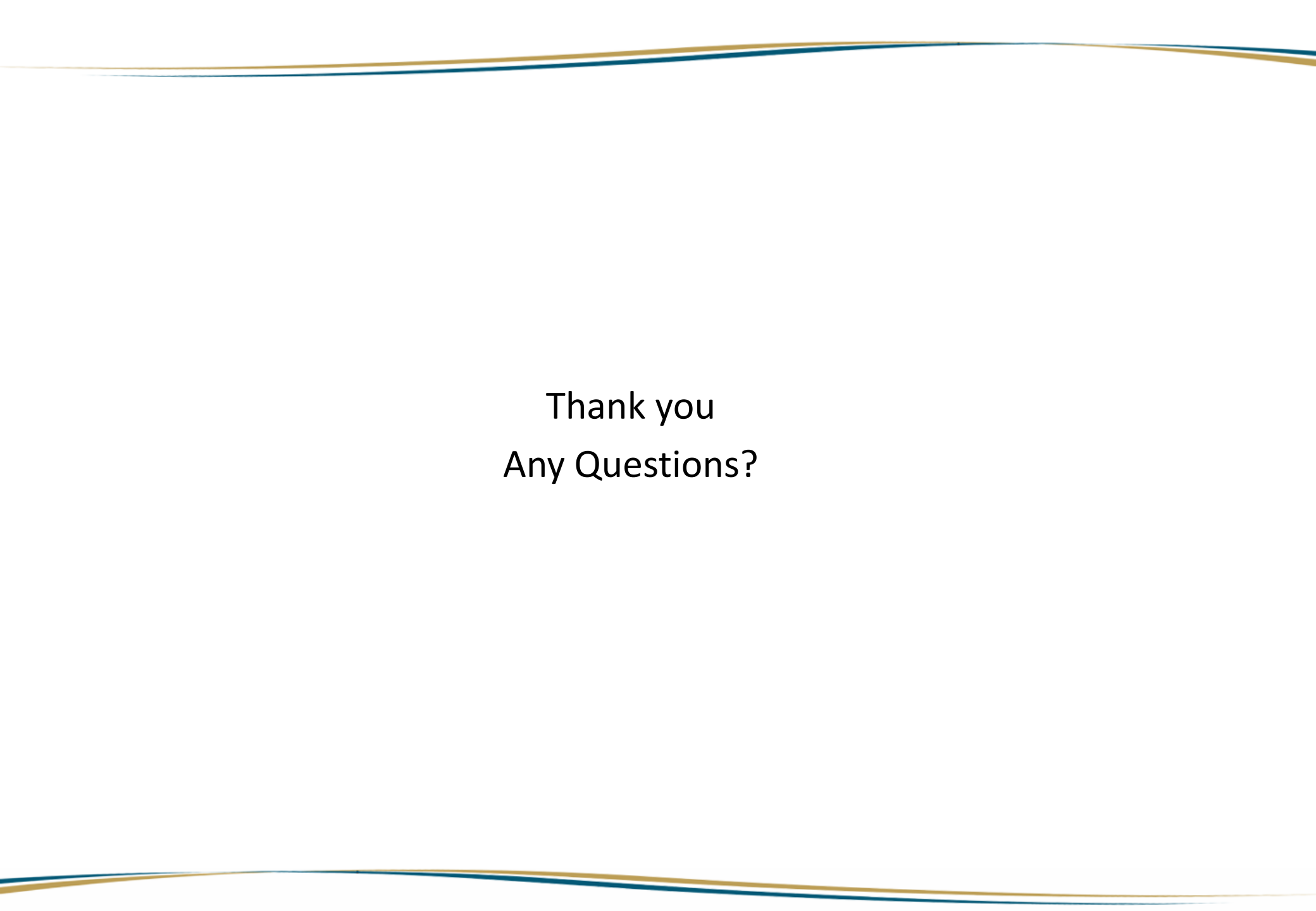
**CREDIT RECD BY
AIRLINE CUSTOMER**

**CLAIM PREPARATION &
SUBMISSION**

**NEGOTIATION &
ADMINISTRATION**

Closure and Reporting

Oman Air warranty claim No.	EO/SWI	Description	SB/SL or other Ref.	Amount Claimed	Amount Approved	Manufacturer Claim No.	Date
WYW/09/062	B3-32-0013	LANDING GEAR -Nose Landing Gear Extension and Retraction - Gear Lock Actuator Trunnion Seals Replacement	737-32-1394	\$1666.50		2010A0002	31 Dec 2009
WYW/09/061	B3-53-0021	Possible Tool mark on BST 178 Bulkhead (Radome Area) A4O-BR	737-SL-53-065	\$121.20		2009H0018	31 Dec 2009
WYW/09/060	B3-53-0029	POSSIBLE GAP COMMON TO THE BODY STATION 203 WATERLINE 234 INNER CHORD SPLICE STRUCTURE	737-SL-53-083	\$484.80		2010A0001	31 Dec 2009
WYW/09/059	B3-53-0031	POSSIBLE MISSING FILLER IN MAIN ENTRY DOOR UPPER SILL AT BS294.5 A4O-BR	737-SL-53-076	\$121.20		2009H0330	31 Dec 2009
WYW/09/058	B3-53-0032	POSSIBLE EXCESS THREAD PROTRUSION ON KEEL BEAM BOLTS AT BS540, WLI50, LBLIO AND RBLIO	737-SL-53-072	\$484.80		2009H0331	31 Dec 2009
WYW/09/057	B3-71-0007	Power Feeder Wire Bundle Chafed against Fan Cowl Hinge Bracket	737-SL-71-058	\$151.50		2009L0350	31 Dec 2009
WYW/09/056	B3-21-0012	AIR CONDITIONING: PROTECTIVE CAPS NOT REMOVED FROM MIX MANIFOLD TEMPERATURE	737-SL-21-083	\$290.88		2009L0349	29 Dec 2009
WYW/09/055	B3-20-0003	WIRE BUNDLE SUPPORT BRACKETS IN NOSE GEAR EE BAY INCORRECTLY INSTALLED	737-SL-20-052-A	\$1060.50		2009L0347	28 Dec 2009
WYW/09/054	B3-53-0049	EXCESSIVE SEALANT IN APU DOOR HINGE CORNERS	737-SL-53-091	\$545.40		2009L0346	24 Dec 2009



Thank you
Any Questions?