Trina Click

From:

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Jerry McCann [jerrymccann@jet-care.com]

Sent:

Monday, June 10, 2013 4:35 PM

To:

Trina Click

Subject:

Enrollment Required per MSP Terms and Conditions - WW2.368 - N83SG

Attachments: Honeywell 731 Form.pdf; F731-77.pdf; SIL F731-77 (Trend) NON MSP Operators.pdf; Bleed-Air-

Leaks-on-Citation-III[1].pdf; ITT-drop-indication[1].pdf; Turbine-Rub-Damage[1].pdf

Lancair of Texas, Inc. / DBA Columbia Aircraft of Texas - Trina Click - WW2.368 - N83SG - Enrollment Required per MSP Terms and Conditions

Dear Trina:

RE: WW2.368 - N83SG:

Thank you so much for taking the time to go over Trending and SOAP Analysis on the engines of N83SG, Trina; much obliged.

We believe that the subject aircraft is now owned and/or operated by your company. Please complete the attached Enrollment per the Terms & Conditions of the Honeywell MSP contract at your earliest opportunity.

Please see attached the Honeywell TFE731 Service Information Letter regarding requirement for Enrollment.

Please complete the attached Enrollment Form (including authorized signature) and fax it to 973-292-3030 or via email to enrollment@jet-care.com or jerrymccann@jet-care.com as soon as possible.

If you are awaiting issuance of your MSP Contract Number, you may put the phrase "MSP Pending" in the Service Contract Type/Number area on the form. This will suffice until your number is issued, at which time you can contact us and we will update.

Total time to complete the Enrollment is generally only 5 minutes (or less).

Please note there is no additional cost of Jet-Care Trend Monitoring services, this is already included in your MSP contract.

If you have any questions, please feel free to contact me at 973-292-9597 or contact the Honeywell Sales Group, Candace Budworth, Chris Jordan, Lucy Martinez via phone (602) 365-5549 / via email mspcontracts@honeywell.com or your local Honeywell Field Service Engineer. Finally, if this should be handled by another party in your company (i.e. Chief Pilot, Director of Aircraft Maintenance: etc) please forward this email to them (and please cc me in) for further action.

Thank you Trina for giving this your attention.

Jerry.

Best regards,

Jerry McCann Sales & Marketing **Jet-Care** 3. Saddle Road, Cedar Knolls, New Jersey, NJ 07927 T: +1 973 292 9597 F: +1 973 292 3030 E: jerrymccann@jet-care.com

W: jet-care.com

JET SABE JET-CARE CONDITION MONITORING EXCELLENCE JET SABE

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ENROLMENT FORM - Honeywell TFE731

JET-CARE ENGINE CONDITION TREND MONITORING PROGRAM



— _		_		JEI SMILE
ENROLMENT	XTRAN	•	UPDATE *	er are using this form to
Please ✓ tick as applicable, † Please ✓ Tick 'Tra update Jet-Care with new Aircraft or Reporting Information possible.	nsfer only it transier nation, please also ir	red ποπ another emon nclude prior name or re	ed operator, in you gistration and J-C C	ode whenever known or
0	WNER / OPERAT	TOR INFORMATION	Texas	
OWNER NAME: Lancair of Texas,		lumbia Airfra		
OPERATOR NAME: Fieldtech Avio	nics Inc.			
	ina Click			
T4-11 Mana		hnical reports - both rou	tine and AOG	
TITLE OKT OSITION.	<u> </u>	1 ma 761		
ADDRESS 1: 4151 N. Main Stree	t, ft. wort	h, Texas 761	106	
ADDRESS 2:				
ADDRESS 3:		017 (25 (
TEL: 817-625-2719	F/	AX: 817-625-6	08/5 	
E-MAIL: tclick@ftav.com		- 201 1 Donal Institute	2	of the shape of
E-mail is Jet-Care's preferred method of reporti			& you update Jet-Ca	are if this changes.
AIR	CRAFT / ENGINE	INFORMATION		
AIRCRAFT TYPE: Westwind 1124A		AIRCRAFT S/N:	368	
ENGINE TYPE: TFE731-3-1-G	DEEC X	AIRCRAFT REGI	STRATION: N	83SG
MANUFACTURER OF THRUST REVERSE	R IF EQUIPPED:	Grumman		
ENGINE S/Ns: #1 P-77482	#2 P-77488	#3	#4	<u> </u>
SERVICE CONTRACT TYPE / NUMBER:			·	
Disclaimer: Owner / Operator acknowledges specifically identified engine condition trend in defects, or performance trends in engines. (2 uncertain and dependent upon factors not kn instrument defects and the timely reporting of and will not rely exclusively upon the JET-C consequence, JET-CARE's liability for any part for such service for said engines for one year, such fee, or to require JET-CARE to perform consequential, indirect, special or incidental dar	monitoring function (2) engine condition (3) engine condition (4) engine condition (5) engine (5) e	ns, and is not design trend monitoring so by JET-CARE, such that by operated the service hereunder ships sole remedy there discretion. In no end account thereof.	ned or intended systems like JET- ch as engine histors, and (3) Ownelures, trends and all be limited to the fore shall JET-C/	to detect all failures, -CARE are inherently tory, past inspections, er / Operator does not a malfunctions. As a ne service fee payable recover the amount of ARE be liable for any
I, the undersigned, have read, understand authorised to sign on behalf of the Owner				
OWNER / OPERATOR AUTHORISED SIGNATORY: SIGN AND PRINT	lu	Kevin Ne		6/25/13
OWNER / OPERATOR SHOULD FAX THE CO				
JET-CARE INTERNATIONAL, INC. 3 Saddle Road, Cedar Knolls		JET-CARE Palace Gate, Odiha	am	
NJ 07927, USA		Hampshire, RG29	1NP, UK	
Tel. +1 973 292 9597	I	Tel. +44 (0) 125 Fax +44 (0) 125		

NB Reports will only be sent after a valid enrolment form has been received by Jet-Care duly signed by Owner / Operator. No reports will be sent until 20 valid data points have been received.

THIS SERVICE AGREEMENT is made on the date of the signature of the Owner / Operator, or their authorised representative, on the Enrolment Form, between: (1) PALACE INTERNATIONAL LIMITED, trading as Jet-Care®, a company incorporated in England and Wales (registered number 03134942) having its registered office at Palace Gate, Odiham, Hampshire, RG29 1NP, UK (the "Supplier"); and (2) the "Client" identified as the Owner / Operator signatory and the Maintenance Service Provider signatory in the Enrolment Form.

WHEREAS:

(A) The Supplier has agreed to provide and the Client has agreed to purchase the Services (as defined below) upon the terms and for the consideration set out in this Agreement.

NOW IT IS HEREBY AGREED as follows:

1. DEFINITIONS

1.1 In this Agreement the following expressions have the following meanings:

"Analysis Materials" means the engine conditioning trend monitoring and gas path analysis data provided by 'Digital Electronic Engine Control' or 'Full-Authority Digital Electronic Control' or 'Electronic Engine Control' or 'Kneepad' or another method as set out in the Enrolment Form or as agreed between the Supplier and the Client;

"Business Day" means a day not being a Saturday, on which trading banks are generally open for business in the City of London.

"Confidential Information" means the contents of this Agreement and any other agreement contemplated by this Agreement information of whatever nature concerning the business, finances, assets, liabilities, dealings, transactions, know-how, customers, suppliers, processes or affairs of the other party, and any information expressed as confidential

"Enrolment Form" means the document headed "Enrolment Form" which includes Client, Aircraft and Reporting details.

"Services" means the engine conditioning trend monitoring and gas path analysis services to be provided to the Client by the Supplier as identified in the Enrolment Form:

"Software Licencing Agreement" means the agreement between the Supplier and the Client for the use of the Engine Condition Health Online® software, also known as ECHO®.

"Trend Monitoring Fees" means the fees payable by the Client to the Supplier under this Agreement as set out in the Invoice and as varied from time to time in accordance with the terms of this Agreement;

- 1.2 References herein to any agreement or other instrument shall be deemed to include references to that agreement or instrument as varied from time to time and references to any enactment shall be deemed to include references to such enactment as extended, reenacted or amended or any enactment by which it may be replaced.
- 1.3 Words denoting the singular shall include the plural and vice versa. Words denoting natural persons shall include corporations and vice versa.
- 1.4 Clause headings are inserted for convenience only and are to be ignored in construing this Agreement.

2. APPOINTMENT

The Client hereby appoints the Supplier to perform the Services and the Supplier agrees to perform such Services in accordance with the provisions of this Agreement.

3. OBLIGATIONS OF THE SUPPLIER

- 3.1 The Supplier shall perform the Services with reasonable skill and care and in accordance with in-house procedures.
- 3.2 The supplier will not disclose or otherwise make available, except to the engine and/or aircraft manufacturer and/or the Maintenance Service provider e.g. JSSI or Lufthansa Technik GmbH, the unprocessed data received by the Supplier from the Client, or the processed data forwarded to the Client under this contract, to any third party whomsoever, unless the Client first agrees in writing.

4. OBLIGATIONS OF THE CLIENT

4.1 The Client shall co-operate fully with the Supplier as regards the provision of the Services, and promptly and at its own expense provide the Supplier with the Analysis Materials within sufficient time to enable the performance of the Supplier's obligations under this Agreement.

4.2 The Client acknowledges and agrees that;

(A) the Service is designed merely to perform specifically identified engine condition trend monitoring and gas path analysis, and is not designed or intended to detect all failures, defects, or performance trends in engines;

(B) engine condition trend monitoring and gas path analysis, such as the Service, are inherently uncertain and dependent upon factors not known or controlled by the Supplier, such as engine history, past inspections, instrument defects and the timely reporting of accurate and thorough data by operators; and

(C) the Client does not and will not rely exclusively upon the Service to detect all engine failures, trends and malfunctions.

(D) the unprocessed data received by the Supplier from the Client, and the processed data forwarded to the Client under this contract, shall be made available to the engine manufacturer, which may use the data in the normal course of its business, provided, however, that the engine manufacturer shall not be permitted to disclose to third parties the identity of the Client or the aircraft to which the data appertains.

5. PAYMENT

5.1 In consideration of the provision of the Services by the Supplier, the Client shall pay the Trend Monitoring Fees (together with

- 5.2 The Client shall pay the Trend Monitoring Fees (together with value added tax thereon) within 1 month of the date of the Supplier's invoice (the "Due Date").
- 5.3 If the Client fails to pay any sum on its Due Date the Supplier may without prejudice to its other rights and remedies, charge the Client interest on the amount unpaid at the annual rate of 2% above the base interest rate of the Bank of England from time to time, accruing daily from the Due Date for payment until the date of actual payment.
- 5.4 The Trend Monitoring Fees do not include expenses incurred by the supplier which will be charged to, and payable by the Client.

6. LIMITATION OF LIABILITY

- 6.1 The Supplier does not exclude liability for death or personal injury to the extent only that the same arises as a result of the negligence of the Supplier, its employees, agents or authorised representatives.
- 6.2 Save as provided in Clause 6.1, the Supplier shall not be liable to the Client for any loss or damage whatsoever or howsoever caused arising directly or indirectly in connection with this Agreement, the Services or otherwise.
- 6.3 Without prejudice to Clause 6.2, the Supplier expressly excludes liability for, without limitation, any indirect, special, incidental or consequential loss or damage which may arise in respect of the Services, or for loss of profit, data, business, revenue, goodwill or anticipated savings and whether or not the Supplier shall have been aware or not of the likelihood of any such loss or damage as aforesaid.
- 6.4 In the event that any exclusion contained in this Agreement shall be held to be invalid for any reason and the Supplier becomes liable for loss or damage that may lawfully be limited, the total aggregate liability of the Supplier shall be limited to the Trend Monitoring Fees payable under the Agreement for the individual aircraft subject to the above loss or damage for 1 year, but in any event [not more than USD 5,000].
- 6.5 Where a breach by the Supplier is actionable under both this Agreement and the Software Licencing Agreement, the Client agrees that it will only make a claim under this Agreement.
- 6.6 The Client acknowledges and agrees that the provisions of Clause 6 are fair and reasonable having regard to the nature of the Services.

7. NOTICE

7.1 Any communication between the Supplier and the Client relating to this Agreement must be in writing and sent by post or facsimile:

(A) to the Client using the details specified in the Enrolment Form; and

(B) to the Supplier at the following address The Managing Director, Jet-Care, Palace Gate, Odiham, Hampshire, RG29 1NP, UK. and fax number +44-(0)1256-393502.

7.2 Such communication shall be deemed to be received;

(A) in the case of a posted letter, on the third Business Day after posting; or

(B) in the case of a facsimile, on production of a transmission report from the machine from which the facsimile was sent which indicates that the facsimile was sent in its entirety to the intended recipient.

7.3 A communication received or deemed to be received on a day that is not a Business Day shall be deemed to be received on the next Business Day.

8. VARIATION

- 8.1 Subject to Clause 8.2, no amendment or modification to this Agreement shall be effective unless executed in writing by both parties.
- 8.2 The Supplier may vary the Trend Monitoring Fees, such variation shall take effect 30 days after the date on which the Supplier gives written notice to the Client. The Client may terminate this Agreement by notice in writing to the Supplier within 30 days of a notice provided by the Supplier under Clause 8.2

9. DURATION, SUSPENSION AND TERMINATION

- 9.1 This Agreement shall commence on the date of signature of the Enrolment Form by the Client and shall continue until it is terminated by the Client giving notice under the terms laid out in this agreement. Notice of cancellation must be given in advance of the annual renewal date, being the anniversary of the commencement date.
- 9.2 The Supplier may by notice in writing to the Client terminate this Agreement if any of the following events shall occur:
 - (A) if the Client is in breach of any term, condition or provision of this Agreement or required by the applicable law to remedy a breach, and fails to remedy such breach (if capable of remedy) within 30 days of having received written notice of such breach from the Supplier, or
 - (B) if the Client, being a body corporate, shall present a petition or have a petition presented by a creditor for its winding up; shall summons a meeting to pass a resolution for voluntary winding up; shall enter into any liquidation (other than for the purposes of a bona fide reconstruction or amalgamation); shall call a meeting of its creditors; shall have a petition for an administration order presented against it; shall have a receiver, administrative receiver, receiver and manager or similar, of all or any of its undertakings or assets appointed; or shall be deemed by the relevant statutory

9.3 Upon termination or expiration of this Agreement, Clauses 12 and 13 shall survive.

10. ASSIGNABILITY

- 10.1 The Supplier may assign (whether absolutely or by way of security and whether in whole or part), transfer mortgage, charge or otherwise dispose in any manner whatsoever of the benefit of this Agreement or sub-contract or delegate its performance under this Agreement without the prior written consent of the Client.
- 10.2 Subject to Clause 10.3, the Client may not assign or transfer any of the rights or obligations under this Agreement.
- 10.3 In the event of the Client undergoing company restructuring, merger or takeover, the Client may only assign this Agreement with the prior written consent of the Supplier, such consent not to be unreasonably withheld.

11. FORCE MAJEURE

- 11.1 In this Clause "Force Majeure Event" means, in relation to either party, any act, event or circumstance, the cause of which is not of such party's making nor within that party's reasonable control, including (to the extent not of that party's making nor within that party's reasonable control). Act of God, war, hostilities (whether or not war has been declared), terrorist acts, acts of any civil or military authority, governmental or regulatory direction or restriction, suspension or withdrawal of licences or consents, riot, insurrection, civil commotion, public demonstration, sabotage, acts of vandalism, fire, flood, earthquake, extreme weather conditions, epidemic, explosion, aircraft crashes or things falling from aircraft, release of ionising radiation or contamination by radioactivity, chemical or biological contamination, the order of any court or governmental or regulatory authority, delay in transportation or communications, breakage of or accidental damage to equipment, any strike, lock-out or other industrial trade dispute (not subsidence, provided always that tack of funds shall not be interpreted as a cause which is not of a party's making nor within a party's reasonable control.
- 11.2 If a party is, or could reasonably be expected to be, materially prevented, hindered or delayed from performing any of its obligations under this Agreement by reason of a Force Majeure Event, such obligations of the affected party and any corresponding or related obligations of the other party shall remain in effect but shall be suspended without liability for a period equal to the duration of the Force Majeure Event, provided that:
 - (A) within 7 days after the start of the Force Majeure Event the affected party shall notify the other party in writing of the act under Clause 7: and
 - (B) the affected party shall make all reasonable efforts to mitigate the effects of the Force Majeure Event on the performance of its obligations under this Agreement, and provide any information relating to the Force Majeure event and its effects that the other party may reasonably request.

12. CONFIDENTIALITY

Each party undertakes to the other that (unless the prior written consent of the other party shall first have been obtained) it shall, and shall procure that its officers, employees, advisers and agents shall keep confidential and not by failure to exercise due care or otherwise by any act or omission disclose to any person whatever, or use or exploit commercially for its or their own purposes, any of the Confidential Information of the other party.

13. INTELLECTUAL PROPERTY RIGHTS

The Client acknowledges that as between the Client and the Supplier, any and all of the copyright, database rights, trademarks, trade names, patents and other intellectual property rights arising out of the performance of the Services, including all documentation, are and shall remain the sole property of the Supplier.

GENERAL

- 14. Failure or neglect by the Supplier to enforce at any time any of the provisions hereof shall not be construed nor shall be deemed to be a waiver of the Supplier's rights hereunder nor in any way affect the validity of the whole or any part of this Agreement nor prejudice the Supplier's rights to take subsequent action.
- 15. This Agreement shall constitute the entire agreement between the parties with respect to its subject matter and without prejudice to any liability for fraudulent misrepresentation supersedes all prior and contemporaneous communications, both written and oral.
- 16. Each party confirms that, except as provided in this Agreement and without prejudice to any liability for fraudulent misrepresentation, neither of them has relied on any representation or warranty or undertaking which is not contained in this Agreement, or which was made by any other party who is not a party to this Agreement and neither of them shall have any remedy in respect of misrepresentation or untrue statement made by any other party unless and to the extent that a claim lies under this Agreement.
- 17. Nothing in this Agreement or in any document referred to in it or any arrangement contemplated by it shall constitute either party a partner of the other nor shall the execution, completion and implementation of this Agreement confer on any party any power to bind or impose any obligations to any third parties on the other party.
- 18. No term of this Agreement is enforceable under the Contracts (Rights of Third Parties) Act 1999 by a person who is not a party to this Agreement.
- 19. In the event that any provision of this Agreement shall be void or unenforceable by reason of any provision of applicable law, it shall be deleted and the remaining provisions hereof shall continue in full force and effect and if necessary, be so amended as shall be necessary to give effect to the spirit of this Agreement so far as possible.
- 20 This Agreement shall be construed in accordance with English

Honeywell

Honeywell International Inc.

111 S. 34th St.

Phoenix, AZ 85034-2802

U.S.A.

CAGE: 99193

Telephone: (800) 601-3099 (Toll Free U.S.A./Canada) Telephone: (602) 365-3099 (International Direct) Telephone: 00-800-601-30999 (EMEA Toll Free) Telephone: 420-234-625-500 (EMEA Direct)

Web site: http://portal.honeywell.com/wps/portal/aero

SERVICE INFORMATION LETTER

APPLICABLE:

X MAINTENANCE & ENGINEERING

X FLIGHT
OPERATIONS

FOR ALL AIRFRAME MANUFACTURERS USING GENERAL AVIATION, GENERAL PRODUCTS AND/OR AUXILIARY POWER UNITS, OWNER/OPERATORS, DISTRIBUTORS, SALES AND SERVICE ORGANIZATIONS, AND FIELD SERVICE REPRESENTATIVES.

This revision is a full replacement of Service Information Letter F731-77.

Applicable To: All TFE731 Models

Subject: TFE731 JET-CARE ENGINE CONDITION TREND MONITORING – MANUALLY

RECORDED DATA (KNEEPAD)

Reference: Service Information Letter F731-88 - Electronic Data (N1 DEEC)

PURPOSE:

The purpose of this Service Information Letter is to provide a thorough discussion of the TFE731

Jet-Care Engine Condition Trend Monitoring (ECTM) program for manually recorded cockpit data (also known as Kneepad data). The basic theory and benefits of ECTM are discussed, along with the data collection, transmittal, and analysis process. The communication process between the operator,

Jet-Care, and Honeywell is also detailed.

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13 Sep 1993 Revision 3, 16 Nov 2007 F731-77

ECTM BACKGROUND:

The basis for Jet-Care ECTM is the observation that certain engine component malfunctions cause engine performance shifts. Industry experience has shown that recording and monitoring inflight engine performance may provide early detection of problems that, if left uncorrected, could lead to costly repairs or cancelled flights.

ENGINE TREND RECORDING PROCEDURE:

Data Recording/Faxing: The TFE731 Jet-Care ECTM program starts in the aircraft cockpit. The flight crew will record key parameters once a stabilized cruise condition is established. Stabilized cruise is defined as 5 minutes after a constant cruise speed is attained. Also, inflight data should only be recorded when airframe and engine anti-ice systems are not in use. However, flight crews are not expected to turn off anti-ice for the purpose of recording data unless flight conditions permit continued safe operation.

Jet-Care ECTM effectiveness is dependent on the amount of data submitted and analyzed. Therefore, flight crews are requested to record data once per flight if cockpit workload permits and stabilization requirements are met. Flight crews may wish to record data more than once per flight on particularly long routes. It is recognized that some flights may be too short to permit the recording of data. Again, the key is that Jet-Care ECTM value is related to the amount of flight data recorded. Therefore, flight data should be recorded when reasonable to do so.

It is important that flight crews write legibly on the standardized Jet-Care data recording form (or trend form – see attachments), making sure to include all parameters including date, flight level, IOAT or RAT or SAT, Mach number, N1, N2, ITT, and fuel flow.

NOTE: Current data recording forms are also available to download from the Jet-Care website: www.jet-care.com.

The data recording form should be faxed to Jet-Care after recording data for three flights OR once per week whichever is sooner (when data has been recorded). The flight crew should make sure the customer name, telephone and fax number, A/C registration number, and A/C type and S/N blanks are completed. Additionally, the flight crew is requested to provide engine S/N and total engine hours/cycles to date. Finally, any pertinent remarks should also be included. For example, if maintenance crews replaced an aircraft ITT gage or turbine section maintenance was performed, these comments should be entered in the appropriate block.

NOTE: Please forward current on-wing performance margins (MEDRA) separately to Jet-Care if available.

JET-CARE ANALYSIS:

The first step in the process is the correction of the data to sea-level standard conditions. The corrected flight data is then compared to empirically derived models of that particular aircraft and engine combination. The models relate corrected values of ITT, N2, and fuel flow to N1 and are based on more than 25 years of accumulating and analyzing actual TFE731 flight data. Deviations between the corrected data and the appropriate models are then calculated. Finally, the corrected data is statistically smoothed to reduce fluctuations due to unavoidable data collection variations. The results of this approach are trend plots of engine performance parameters that are used to assess the overall condition of the engine.

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OPERATOR CONTACT/REPORT:

After 20 data points are received, Jet-Care will provide a monthly engine "health" report graphically detailing ITT, N2, and fuel flow trends to the operator. In addition to engine performance trends, cockpit gage shifts and other issues that cause engine trends can be identified.

In addition to the monthly reports supplied to the operator, Jet-Care will notify the operator of shifts or anomalies observed in performance trends or in any of the other engine parameters being tracked. This notification takes two forms. If the shift is something that does not require immediate action, Jet-Care will notify the operator via the monthly report. If a more noticeable engine shift has occurred, Jet-Care will notify the operator/Honeywell immediately by e-mail/fax or telephone as appropriate.

NOTE:

ECTM data may be forwarded as manual data and N1 DEEC data (downloads) simultaneously. Jet-Care will trend and report both systems free of charge under

MSP. (Refer to SIL F731-88.)

TFE731 JET-CARE ECTM PROGRAM COST AND ENROLLMENT PROCESS:

Since introduction in May 1993, Jet-Care has been instrumental in reducing engine repair costs and improving aircraft dispatch reliability. As such, Honeywell is providing the Jet-Care program to all operators under MSP at no additional charge. As per the MSP contract, operators must comply with manufacturer recommendations regarding the operation and maintenance of their engines; therefore enrollment and participation in the Jet-Care ECTM program is mandatory. MSP operators not currently enrolled should complete and fax the attached Enrollment Form direct to Jet-Care.

NOTE:

Current enrollment forms are also available to download from the Jet-Care

website: www.jet-care.com.

Non-MSP operators may subscribe to the program at a reasonable annual fee. Non-MSP operators should contact Jet-Care International direct at one of the provided addresses or telephone numbers concerning the cost and/or enrollment process. Operators who want to maintain coverage under Honeywell special programs must be enrolled and participating in Jet-Care to qualify.

JET-CARE INTERNATIONAL, INC.

3 Saddle Road Cedar Knolls, New Jersey 07927-1902 U.S.A.

Telephone: 973-292-9597 (or 9598)

JET-CARE

Palace Gate High Street, Odiham Hampshire RG29 1NP

UK

Telephone: 44 1256 701 777

13 Sep 1993 Revision 3, 16 Nov 2007 F731-77

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ENROLMENT FORM - Honeywell TFE731 JET-CARE ENGINE CONDITION TREND MONITORING PROGRAM



	ENROLMENT	☐TRAN	ISFER †	☐UPDATE *
Please ✓ tick as appli update Jet-Care with new possible.	cable, † Please ✔ Tick 'Trans w Aircraft or Reporting Informa	sfer' only if transfe ation, please also i	rred from a nclude pric	another enrolled operator, * If you are using this form to or name or registration and J-C Code whenever known or
	Ow	NER / OPERA	TOR INFO	ORMATION
OWNER NAME:				J-C CODE:
OPERATOR NAME:				
PRINCIPAL REPOR	TING CONTACT:			
	NB This must be the cont	act for aircraft tec	hnical repo	orts - both routine and AOG
TITLE OR POSITION	\ :			
ADDRESS 1:				
ADDRESS 2:				
ADDRESS 3:				
TEL:		F	AX:	
E-MAIL:				
E-mail is Jet-Care's	preferred method of reporting	, please ensure th	at this is cl	learly legible & you update Jet-Care if this changes.
	AIRCE	RAFT / ENGINE	E INFORM	MATION
AIRCRAFT TYPE:			AIRCF	RAFT S/N:
ENGINE TYPE:		DEEC	AIRCE	RAFT REGISTRATION:
MANUFACTURER C	F THRUST REVERSER I	F EQUIPPED:		
ENGINE S/Ns:	#1	#2		#3 #4
SERVICE CONTRAC	CT TYPE / NUMBER:			
specifically identified edefects, or performand uncertain and depend instrument defects and and will not rely exclusion consequence, JET-CA for such service for sa such fee, or to require	engine condition trend mo be trends in engines. (2) ent upon factors not know the timely reporting of ac- usively upon the JET-CAF RE's liability for any particu- id engines for one year. C	entioring function engine condition on or controlled curate and thore RE system to cular monitoring so owner / Operatore service in its	ns, and is n trend n l by JET- ough data detect all service he r's sole re discretion	ET-CARE system is designed merely to perform a not designed or intended to detect all failures monitoring systems like JET-CARE are inherently CARE, such as engine history, past inspections a by operators, and (3) Owner / Operator does not engine failures, trends and malfunctions. As a greunder shall be limited to the service fee payable emedy therefore shall be to recover the amount on. In not event shall JET-CARE be liable for any tithereof.
				by the above disclaimer and have been of Jet-Care's Terms and Conditions.
OWNER / OPERATORY: SIGNATORY: SIGNATORY:				DATE:
OWNER / OPERATO	R SHOULD FAX THE <u>COM</u>	MPLETED AND	SIGNED	FORM TO:
JET-CARE INTER! 3 Saddle Road, Ce NJ 07927, USA Tel. +1 973 292 Fax. +1 973 292	dar Knolls 9597		Hampshi Tel. +	RE Gate, Odiham ire, RG29 1NP, UK +44 (0) 1256 701 777 +44 (0) 1256 701 377

NB Reports will only be sent after a valid enrolment form has been received by Jet-Care duly signed by Owner / Operator. No reports will be sent until 20 valid data points have been received.

THIS SERVICE AGREEMENT is made on the date of the signature of the Owner / Operator, or their authorised representative, on the Enrolment Form, between: (1) PALACE INTERNATIONAL LIMITED, trading as Jet-Care®, a company incorporated in England and Wales (registered number 03134942) having its registered office at Palace Gate, Odiham, Hampshire, RG29 1NP, UK (the "Supplier"); and (2) the "Client" identified as the Owner / Operator signatory and the Maintenance Service Provider signatory in the Enrolment Form.

WHEDEAS

(A) The Supplier has agreed to provide and the Client has agreed to purchase the Services (as defined below) upon the terms and for the consideration set out in this Agreement.

NOW IT IS HEREBY AGREED as follows

1. DEFINITIONS

- 1.1 In this Agreement the following expressions have the following meanings:
- "Analysis Materials" means the engine conditioning trend monitoring and gas path analysis data provided by 'Digital Electronic Engine Control or 'Full-Authority' Digital Electronic Control or 'Electronic Engine Control or 'Kneepad' or another method as set out in the Enrolment Form or as agreed between the Supplier and the Client:
- "Business Day" means a day not being a Saturday, on which trading banks are generally open for business in the City of London.
- "Confidential Information" means the contents of this Agreement and any other agreement contemplated by this Agreement; information of whatever nature concerning the business, finances, assets, liabilities, dealings, transactions, know-how, customers, suppliers, processes or affairs of the other party, and any information expressed as confidential.
- "Enrolment Form" means the document headed "Enrolment Form" which includes Client, Aircraft and Reporting details.
- "Services" means the engine conditioning trend monitoring and gas path analysis services to be provided to the Client by the Supplier as identified in the Enrolment Form;
- "Software Licencing Agreement" means the agreement between the Supplier and the Client for the use of the Engine Condition Health Online® software, also known as ECHO®.
- "Trend Monitoring Fees" means the fees payable by the Client to the Supplier under this Agreement as set out in the Invoice and as varied from time to time in accordance with the terms of this Agreement;
- 1.2 References herein to any agreement or other instrument shall be deemed to include references to that agreement or instrument as varied from time to time and references to any enactment shall be deemed to include references to such enactment as extended, reenacted or amended or any enactment by which it may be replaced.
- 1.3 Words denoting the singular shall include the plural and vice versa. Words denoting natural persons shall include corporations and vice versa.
- 1.4 Clause headings are inserted for convenience only and are to be ignored in construing this Agreement.

2. APPOINTMENT

The Client hereby appoints the Supplier to perform the Services and the Supplier agrees to perform such Services in accordance with the provisions of this Agreement.

3 OBLIGATIONS OF THE SUPPLIER

- 3.1 The Supplier shall perform the Services with reasonable skill and care and in accordance with in-house procedures.
- 3.2 The supplier will not disclose or otherwise make available, except to the engine and/or aircraft manufacturer and/or the Maintenance Service provider e.g. JSSI or Lufthansa Technik GmbH, the unprocessed data received by the Supplier from the Client, or the processed data forwarded to the Client under this contract, to any third party whomsoever, unless the Client first agrees in writino.

4. OBLIGATIONS OF THE CLIENT

- 4.1 The Client shall co-operate fully with the Supplier as regards the provision of the Services, and promptly and at its own expense provide the Supplier with the Analysis Materials within sufficient time to enable the performance of the Supplier's obligations under this Agreement.
- 4.2 The Client acknowledges and agrees that;
 - (A) the Service is designed merely to perform specifically identified engine condition trend monitoring and gas path analysis, and is not designed or intended to detect all failures, defects, or performance trends in engines;
 - (B) engine condition trend monitoring and gas path analysis, such as the Service, are inherently uncertain and dependent upon factors not known or controlled by the Supplier, such as engine history, past inspections, instrument defects and the timely reporting of accurate and thorough data by operators; and
 - (C) the Client does not and will not rely exclusively upon the Service to detect all engine failures, trends and malfunctions.
 - (D) the unprocessed data received by the Supplier from the Client, and the processed data forwarded to the Client under this contract, shall be made available to the engine manufacturer, which may use the data in the normal course of its business, provided, however, that the engine manufacturer shall not be permitted to disclose to third parties the identity of the Client or the aircraft to which the data appertains.

5. PAYMENT

5.1 In consideration of the provision of the Services by the Supplier, the Client shall pay the Trend Monitoring Fees (together with value added tax thereon).

- 5.2 The Client shall pay the Trend Monitoring Fees (together with value added tax thereon) within 1 month of the date of the Supplier's invoice (the "Due Date").
- 5.3 If the Client fails to pay any sum on its Due Date the Supplier may without prejudice to its other rights and remedies, charge the Client interest on the amount unpaid at the annual rate of 2% above the base interest rate of the Bank of England from time to time, accruing daily from the Due Date for payment until the date of actual payment.
- 5.4 The Trend Monitoring Fees do not include expenses incurred by the supplier which will be charged to, and payable by the Client

E. LIMITATION OF LIABILITY

- 6.1 The Supplier does not exclude liability for death or personal injury to the extent only that the same arises as a result of the negligence of the Supplier, its employees, agents or authorised representatives.
- 6.2 Save as provided in Clause 6.1, the Supplier shall not be liable to the Client for any loss or damage whatsoever or howsoever caused arising directly or indirectly in connection with this Agreement, the Services or otherwise.
- 6.3 Without prejudice to Clause 6.2, the Supplier expressly excludes liability for, without limitation, any indirect, special, incidental or consequential loss or damage which may arise in respect of the Services, or for loss of profit, data, business, revenue, goodwill or anticipated savings and whether or not the Supplier shall have been aware or not of the likelihood of any such loss or damage as aforesaid.
- 6.4 In the event that any exclusion contained in this Agreement shall be held to be invalid for any reason and the Supplier becomes liable for loss or damage that may lawfully be limited, the total aggregate liability of the Supplier shall be limited to the Trend Monitoring Fees payable under the Agreement for the individual aircraft subject to the above loss or damage for 1 year, but in any event (not more than USD 5,000).
- 6.5 Where a breach by the Supplier is actionable under both this Agreement and the Software Licencing Agreement, the Client agrees that it will only make a claim under this Agreement.
- 6.6 The Client acknowledges and agrees that the provisions of Clause 6 are fair and reasonable having regard to the nature of the Services.

7 NOTIC

- 7.1 Any communication between the Supplier and the Client relating to this Agreement must be in writing and sent by post or facsimile:
 - (A) to the Client using the details specified in the Enrolment Form; and
 - (B) to the Supplier at the following address The Managing Director, Jet-Care, Palace Gate, Odiham, Hampshire, RG29 1NP, UK. and fax number +44-(0)1256-393502.
- 7.2 Such communication shall be deemed to be received;
 - (A) in the case of a posted letter, on the third Business Day after posting; or $% \left\{ 1,2,\ldots,n\right\}$
 - (B) in the case of a facsimile, on production of a transmission report from the machine from which the facsimile was sent which indicates that the facsimile was sent in its entirety to the intended recipient.
- 7.3 A communication received or deemed to be received on a day that is not a Business Day shall be deemed to be received on the next Business Day.

8. VARIATION

- 8.1 Subject to Clause 8.2, no amendment or modification to this Agreement shall be effective unless executed in writing by both parties.
- 6.2 The Supplier may vary the Trend Monitoring Fees, such variation shall take effect 30 days after the date on which the Supplier gives written notice to the Client. The Client may terminate this Agreement by notice in writing to the Supplier within 30 days of a notice provided by the Supplier under Clause 8.2.

9. DURATION, SUSPENSION AND TERMINATION

- 9.1 This Agreement shall commence on the date of signature of the Enrolment Form by the Client and shall continue until it is terminated by the Client giving notice under the terms laid out in this agreement. Notice of cancellation must be given in advance of the annual renewal date, being the anniversary of the commencement date.
- 9.2 The Supplier may by notice in writing to the Client terminate this Agreement if any of the following events shall
 - (A) if the Client is in breach of any term, condition or provision of this Agreement or required by the applicable law to remedy a breach, and falls to remedy such breach (if capable of remedy) within 30 days of having received written notice of such breach from the Supplier; or
 - (B) if the Client, being a body corporate, shall present a petition or have a petition presented by a creditor for its winding up; shall summons a meeting to pass a resolution for voluntary winding up; shall enter into any liquidation (other than for the purposes of a bona fide reconstruction or amalgamation); shall call a meeting of its creditors; shall have a petition for an administration order presented against it; shall have a receiver, administrative receiver, receiver and manager or similar, of all or any of its undertakings or assets appointed; or shall be deemed by the relevant statutory provisions under the applicable law to be unable to pay its richts.

9.3 Upon termination or expiration of this Agreement, Clauses 12 and 13 shall survive.

10. ASSIGNABILITY

- 10.1 The Supplier may assign (whether absolutely or by way of security and whether in whole or part), transfer mortgage, charge or otherwise dispose in any manner whatsoever of the benefit of this Agreement or sub-contract or delegate its performance under this Agreement without the prior written consent of the Client.
- 10.2 Subject to Clause 10.3, the Client may not assign or transfer any of the rights or obligations under this Agreement.
- 10.3 In the event of the Client undergoing company restructuring, merger or takeover, the Client may only assign this Agreement with the prior written consent of the Supplier, such consent not to be unreasonably withheld.

11. FORCE MAJEURE

- 11.1 In this Clause "Force Majeure Event" means, in relation to either party, any act, event or circumstance, the cause of which is not of such party's making nor within that party's reasonable control, including (to the extent not of that party's making nor within that party's reasonable control) Act of God, war, hostilities (whether or not war has been declared), terrorist acts, acts of any civil or military authority, governmental or regulatory direction or restriction, suspension or withdrawal of licences or consents, riot, insurrection, civil commotion, public demonstration, sabotage, acts of vandalism, fire, flood, earthquake, extreme weather conditions, epidemic, explosion, aircraft crashes or things falling from aircraft, release of ionising radiation or contamination by radioactivity, chemical or biological contamination, the order of any court or governmental or regulatory authority, delay in transportation or communications, breakage of or accidental damage to equipment, any strike, lock-out or other industrial trade dispute (not involving solely the employees of that party), structural shift or subsidence, provided always that lack of funds shall not be interpreted as a cause which is not of a party's making nor within a party's reasonable control.
- 11.2 If a party is, or could reasonably be expected to be, materially prevented, hindered or delayed from performing any of its obligations under this Agreement by reason of a Force Majeure Event, such obligations of the affected party and any corresponding or related obligations of the other party shall remain in effect but shall be suspended without liability for a period equal to the duration of the Force Majeure Event, provided that:
 - (A) within 7 days after the start of the Force Majeure Event the affected party shall notify the other party in writing of the act under Clause 7; and
 - (B) the affected party shall make all reasonable efforts to mitigate the effects of the Force Majeure Event on the performance of its obligations under this Agreement, and provide any information relating to the Force Majeure event and its effects that the other party may reasonably request.

12. CONFIDENTIALITY

Each party undertakes to the other that (unless the prior written consent of the other party shall first have been obtained) it shall, and shall procure that its officers, employees, advisers and agents shall keep confidential and not by failure to exercise due care or otherwise by any act or omission disclose to any person whatever, or use or exploit commercially for its or their own purposes, any of the Confidential Information of the other party.

13. INTELLECTUAL PROPERTY RIGHTS

The Client acknowledges that as between the Client and the Supplier, any and all of the copyright, database rights, trademarks, trade names, patents and other intellectual property rights arising out of the performance of the Services, including all documentation, are and shall remain the sole property of the Supplier.

GENERAL

- 14. Failure or neglect by the Supplier to enforce at any time any of the provisions hereof shall not be construed nor shall be deemed to be a waiver of the Supplier's rights hereunder nor in any way affect the validity of the whole or any part of this Agreement nor prejudice the Supplier's rights to take subsequent action.
- 15. This Agreement shall constitute the entire agreement between the parties with respect to its subject matter and without prejudice to any liability for fraudulent misrepresentation supersedes all prior and contemporaneous communications, both written and oral.
- 16. Each party confirms that, except as provided in this Agreement and without prejudice to any liability for fraudulent misrepresentation, neither of them has relied on any representation or warranty or undertaking which is not contained in this Agreement, or which was made by any other party who is not a party to this Agreement and neither of them shall have any remedy in respect of misrepresentation or untrue statement made by any other party unless and to the extent that a claim lies under this Agreement.
- 17. Nothing in this Agreement or in any document referred to in it or any arrangement contemplated by it shall constitute either party a partner of the other nor shall the execution, completion and implementation of this Agreement confer on any party any power to bind or impose any obligations to any third parties on the other party.
- No term of this Agreement is enforceable under the Contracts (Rights of Third Parties) Act 1999 by a person who is not a party to this Agreement.
- 19. In the event that any provision of this Agreement shall be void or unenforceable by reason of any provision of applicable law, it shall be deleted and the remaining provisions hereof shall continue in full force and effect and if necessary, be so amended as shall be necessary to give effect to the spirit of this Agreement so far as possible.
- 20 This Agreement shall be construed in accordance with English Law and the parties submit to the non-exclusive jurisdiction of the Courts of England in relation to any claim, dispute or difference concerning this Agreement and any matter arising there from.



TFE 731 ENGINE
TREND MONITORING
2 engine aircraft

CUSTOMER:		JET CARE CODE:	FAX TO
PHONE:		FAX:	US: (1) 973-292-3030
A/C REG:	TYPE:	S/N	UK:+44-1256-701377

NOTE: FLIGHT DATA IS TO BE RECORDED DURING EVERY FLIGHT, ANTI-ICE OFF (CONSISTENT WITH SAFE OPS), DURING STABLE CRUISE (FIVE MINUTES AFTER STABILIZED CRUISE SPEED IS ATTAINED). *Both if convenient

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							JC ONLY				
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SEP 27, 2006



TFE 731 ENGINE TREND MONITORING 3 engine aircraft

CUSTOMER:

PHONE:

FAX:

A/C REG:

TYPE:

S/N:

FAX TO

US: (1) 973-292-3030

UK: +44-1256-701377 <

NOTE: FLIGHT DATA IS TO BE RECORDED DURING EVERY FLIGHT, ANTI-ICE OFF (CONSISTENT WITH SAFE OPS), DURING STABLE CRUISE (FIVE MINIUTES AFTER STABILIZED CRUISE SPEED IS ATTAINED). *Both if convenient

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JET CARE JET-CARE JET SARE

TFE 731 ENGINE TREND MONITORING 4 engine aircraft

CUSTOMER:		JET CARE CODE:	FAX TO	
PHONE:	FAX:		US: (1) 973-292-3030	-
A/C REG	TYPE:	S/N:	UK: +44-1256-701377	

NOTE: FLIGHT DATA IS TO BE RECORDED DURING EVERY FLIGHT, ANTI-ICE OFF (CONSISTENT WITH SAFE OPS), DURING STABLE CRUISE (FIVE MINUTES AFTER STABILIZED CRUISE SPEED IS ATTAINED). *Both If convenient DATE FLIGHT 1 DATE FLIGHT 2 DATE FLIGHT 3 **FLIGHT LEVEL FLIGHT LEVEL FLIGHT LEVEL** RAT(IOAT) | * RAT(IOAT) * RAT(IOAT) : * SAT SAT SAT AIR TEMP OR AIR TEMP OR AIR TEMP OR IAS MACH IAS MACH IAS MACH AIRSPEED AIRSPEED OR OR AIRSPEED OR ENG 1 ENG 1 ENG 1 ENG 2 ENG 3 ENG 4 ENG 2 ENG 3 ENG 4 ENG 2 ENG 3 ENG 4 S/N S/N N1% N1% N1% N2% N2% N2% ITT^oC Fuel Flow Fuel Flow Fuel Flow **OPTIONAL OPTIONAL OPTIONAL** OIL Px OIL Px (psi) OIL Px (psi) (psi) Oil Temp Oil Temp! Oil Temp (°C) (°C) (°C) Engine Tot. CUSTOMER COMMENTS: (ENGINE CHANGE,INSTRUMENT CHANGE ETC). Hours

Hours Engine Tot. Cycles

JC ONLY

JC25 Issue 2 SEP 27, 2006

Honeywell

SERVICE INFORMATION LETTER

Engines & Systems - Phoenix, Arizona

APPLICABLE:

MAINTENANCE & ENGINEERING

X FLIGHT OPERATIONS

FOR ALL AIRFRAME MANUFACTURERS USING GENERAL AVIATION, GENERAL PRODUCTS AND/OR AUXILIARY POWER UNITS, OWNER/OPERATORS, DISTRIBUTORS, SALES AND SERVICE ORGANIZATIONS, AND FIELD SERVICE REPRESENTATIVES.

This is a **COMPLETE** revision. This service information letter has been reprinted in its entirety. Please remove and discard all pages of prior issues and replace with pages of this revision.

Applicable To:

TFE731-2/-3/-4/-5

Subject:

TFE731 JET-CARE ENGINE CONDITION TREND MONITORING

PURPOSE:

The purpose of this Service Information Letter is to provide a thorough discussion of the TFE731 Jet-Care Engine Condition Trend Monitoring (ECTM) program. The basic theory and benefits of ECTM are discussed, along with the data collection, transmittal, and analysis process. The communication process between the operator, Jet-Care, and Engines & Systems is also detailed.

ECTM BACKGROUND:

The basis for Jet-Care ECTM is the observation that certain engine component malfunctions cause engine performance shifts. Industry experience has shown that recording and monitoring inflight engine performance may provide early detection of problems that, if left uncorrected, could lead to costly repairs or cancelled flights.

TFE731 JET-CARE PROCEDURE:

Data Recording/Faxing: The TFE731 Jet-Care ECTM program starts in the aircraft cockpit. The flight crew will record key parameters once a stabilized cruise condition is established. Stabilized cruise is defined as five minutes after a constant cruise speed is attained. Also, inflight data should only be recorded when airframe and engine anti-ice systems are not in use. However, flight crews are not expected to turn off anti-ice for the purpose of recording data unless flight conditions permit continued safe operation.

Jet-Care ECTM effectiveness is dependent on the amount of data submitted and analyzed. Therefore, flight crews are requested to record data once per flight if cockpit workload permits and stabilization requirements are met. Flight crews may wish to record data more than once per flight on particularly long routes. It is recognized that some flights may be too short to permit the recording of data. Again, the key is that Jet-Care ECTM value is related to the amount of flight data recorded. Therefore, flight data should be recorded when reasonable to do so.

It is important that flight crews write legibly on the data recording form (see attachments), making sure to include all parameters including date, flight level, IOAT or RAT or SAT, Mach number, N1, N2, ITT, and fuel flow.

Engines & Systems - Phoenix, Arizona

Flight crews should fax the data recording form to Jet-Care after recording data for three flights (two for Jetstar operators). The flight crew should make sure the customer name, telephone and fax number, A/C registration number, and A/C type and S/N blanks are completed. Additionally, the flight crew is requested to provide engine S/N and total engine hours/cycles to date. Finally, any pertinent remarks should also be included. For example, if maintenance crews replaced an aircraft ITT gage or turbine section maintenance was performed, these comments should be entered in the appropriate block. Please include on-wing performance margins and date if available.

Please note that the flight crew may choose one of three fax numbers listed on the data recording form. The toll free "800" number may be used if the fax is being sent from North America.

JET-CARE ANALYSIS:

The first step in the process is the correction of the data to sea-level standard conditions. The corrected flight data is then compared to empirically derived models of that particular aircraft and engine combination. The models relate corrected values of ITT, N2, and fuel flow to N1 and are based on more than 15 years of accumulating and analyzing actual TFE731 flight data. Deviations between the corrected data and the appropriate models are then calculated. Finally, the corrected data is statistically smoothed to reduce fluctuations due to unavoidable data collection variations. The results of this approach are trend plots of engine performance parameters that are used to assess the overall condition of the engine.

OPERATOR CONTACT/REPORT:

After 20 data points are received, Jet-Care will provide a monthly engine "health" report graphically detailing ITT, N2, and fuel flow trends to the operator. In addition to engine performance trends, cockpit gage shifts and other issues that cause engine trends can be identified.

In addition to the monthly reports supplied to the operator, Jet-Care will notify the operator of shifts or anomalies observed in performance trends or in any of the other engine parameters being tracked. This notification takes two forms. If the shift is something that does not require immediate action, Jet-Care will notify the operator via the monthly report. If a more noticeable engine shift has occurred, Jet-Care will notify the operator/Honeywell immediately via fax or telephone.

Honeywell

SERVICE INFORMATION LETTER

Engines & Systems - Phoenix, Arizona

TFE731 JET-CARE ECTM PROGRAM COST AND ENROLLMENT PROCESS:

Since introduction in May 1993, Jet-Care has been instrumental in reducing engine repair costs and improving aircraft dispatch reliability. As such, Honeywell is providing the Jet-Care program to all operators under MSP at no additional charge. As per the MSP contract, operators must comply with manufacturer recommendations regarding the operation and maintenance of their engines. Therefore, since participation in Jet-Care is recommended, MSP operators must enroll and participate in the Jet-Care ECTM program. MSP operators not currently enrolled should complete and fax the attached **Enrollment Form** direct to Jet-Care International at one of the provided fax numbers on the form.

Non-MSP operators may subscribe to the program at a reasonable annual fee. Non-MSP operators should contact Jet-Care International direct at one of the provided addresses or telephone numbers concerning the cost and/or enrollment process. Operators who want to maintain coverage under Honeywell special programs must be enrolled and participating in Jet-Care to qualify.

JET-CARE INTERNATIONAL, INC.

C/O TFE731 ECTMPlus Program 3 Saddle Road Cedar Knolls, New Jersey 07927-1902 Phone (United States) 973-292-9597 (or 9598)

JET-CARE INTERNATIONAL, LTD.

Palace Gate High Street, Odiham Hampshire RG29 1NP Phone (UK) 44 1256 701 777

ENROLMENT FORM – Honeywell TFE731

JET-CARE ENGINE CONDITION TREND MONITORING PROGRAM

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E-MAIL:			
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ENGINE S/Ns: #1	#2	#3	#4
SERVICE CONTRACT TYPE / NUMBER:			
Disclaimer: Owner / Operator acknowledges a specifically identified engine condition trend modefects, or performance trends in engines. (2) uncertain and dependent upon factors not kno instrument defects and the timely reporting of act and will not rely exclusively upon the JET-CA consequence, JET-CARE's liability for any particular for such service for said engines for one year. (such fee, or to require JET-CARE to perform to consequential, indirect, special or incidental dam	onitoring function engine condition wn or controlled ccurate and thore RE system to dular monitoring sowner / Operator he service in its ages or losses or	s, and is not design trend monitoring by JET-CARE, such that a by operate etect all engine fail ervice hereunder shads sole remedy there discretion. In no en account thereof.	ned or intended to detect all failures, systems like JET-CARE are inherently that as engine history, past inspections, ors, and (3) Owner / Operator does not lures, trends and malfunctions. As a all be limited to the service fee payable efore shall be to recover the amount of vent shall JET-CARE be liable for any
I, the undersigned, have read, understand a authorised to sign on behalf of the Owner / 0			
OWNER / OPERATOR AUTHORISED SIGNATORY: SIGN AND PRINT			DATE:
OWNER / OPERATOR SHOULD FAX THE CO	MPLETED AND	SIGNED FORM TO:	
JET-CARE INTERNATIONAL, INC. 3 Saddle Road, Cedar Knolls NJ 07927, USA Tel. +1 973 292 9597 Fax. +1 973 292 3030	F F	` '	

NB Reports will only be sent after a valid enrolment form has been received by Jet-Care duly signed by Owner / Operator. No reports will be sent until 20 valid data points have been received.

THIS SERVICE AGREEMENT is made on the date of the signature of the Owner / Operator, or their authorised representative, on the Enrolment Form, between: (1) PALACE INTERNATIONAL LIMITED, trading as Jet-Care®, a company incorporated in England and Wales (registered number 03134942) having its registered office at Palace Gate, Odiham, Hampshire, RG29 1NP, UK (the "Supplier"); and (2) the "Client" identified as the Owner / Operator signatory and the Maintenance Service Provider signatory in the Enrolment Form.

WHEREAS:

The Supplier has agreed to provide and the Client has agreed purchase the Services (as defined below) upon the terms and for the consideration set out in this Agreement.

NOW IT IS HEREBY AGREED as follows:

DEFINITIONS

In this Agreement the following expressions have the following meanings

"Analysis Materials" means the engine conditioning trend monitoring and gas path analysis data provided by 'Digital Electronic Engine Control' or 'Full-Authority Digital Electronic Control' or 'Electronic Control' or 'He Enrolment Form or as agreed between the Supplier and the Client;

"Business Day" means a day not being a Saturday, on which trading banks are generally open for business in the City of London.

"Confidential Information" means the contents of this Agreement and any other agreement contemplated by this Agreement, information of whatever nature concerning the business, finances, assets, liabilities, dealings, transactions, know-how, customers, suppliers, processes or affairs of the other party, and any information expressed

"Enrolment Form" means the document headed "Enrolment Form" which includes Client, Aircraft and Reporting details.

"Services" means the engine conditioning trend monitoring and gas path analysis services to be provided to the Client by the Supplier as identified in the Enrolment Form:

"Software Licencing Agreement" means the agreement between the Supplier and the Client for the use of the Engine Condition Health Online® software, also known as ECHO®.

"Trend Monitoring Fees" means the fees payable by the Client to the Supplier under this Agreement as set out in the Invoice and as varied from time to time in accordance with the terms of this Agreement;

- 1.2 References herein to any agreement or other instrument shall be deemed to include references to that agreement or instrument as varied from time to time and references to any enactment shall be deemed to include references to such enactment as extended, reenacted or amended or any enactment by which it may be replaced
- 1.3 Words denoting the singular shall include the plural and vice versa. Words denoting natural persons shall include corporations and vice versa
- Clause headings are inserted for convenience only and are to be ignored in construing this Agreement.

APPOINTMENT 2.

The Client hereby appoints the Supplier to perform the Services and the Supplier agrees to perform such Services in accordance with the provisions of this Agreement.

3. OBLIGATIONS OF THE SUPPLIER

- The Supplier shall perform the Services with reasonable skill and care and in accordance with in-house procedures.
- 3.2 The supplier will not disclose or otherwise make available, except to the engine and/or aircraft manufacturer and/or the Maintenance Service provider e.g. JSSI or Lufthansa Technik Gmbh1, the unprocessed data received by the Supplier from the Client, or the processed data forwarded to the Client under this contract, to any third party whomsoever, unless the Client first agrees in writing.

OBLIGATIONS OF THE CLIENT

- The Client shall co-operate fully with the Supplier as regards the provision of the Services, and promptly and at its own expense provide the Supplier with the Analysis Materials within sufficient time to enable the performance of the Supplier's obligations under this
- The Client acknowledges and agrees that:
 - (A) the Service is designed merely to perform specifically identified engine condition trend monitoring and gas path analysis, and is not designed or intended to detect all failures, defects, or performance
 - (B) engine condition trend monitoring and gas path analysis, such as the Service, are inherently uncertain and dependent upon factors not known or controlled by the Supplier, such as engine history, past inspections, instrument defects and the timely reporting of accurate and thorough data by operators; and
 - (C) the Client does not and will not rely exclusively upon the Service to detect all engine failures, trends and malfunctions.
 - (D) the unprocessed data received by the Supplier from the Client, and the processed data forwarded to the Client under this contract, shall be made available to the engine manufacturer, which may use the data in the normal course of its business, provided, however, that the engine manufacturer shall not be permitted to disclose to third parties the identity of the Client or the aircraft to which the data appertains.

PAYMENT

In consideration of the provision of the Services by the Supplier, the Client shall pay the Trend Monitoring Fees (together with

- The Client shall pay the Trend Monitoring Fees (together with value added tax thereon) within 1 month of the date of the Supplier's invoice (the "Due Date").
- 5.3 If the Client fails to pay any sum on its Due Date the Supplier may without prejudice to its other rights and remedies, charge the Client interest on the amount unpaid at the annual rate of 2% above the base interest rate of the Bank of England from time to time, accruing daily from the Due Date for payment until the date of actual payment
- 5.4 The Trend Monitoring Fees do not include expenses incurred by the supplier which will be charged to, and payable by

6. LIMITATION OF LIABILITY

- 6.1 The Supplier does not exclude liability for death or personal injury to the extent only that the same arises as a result of the negligence of the Supplier, its employees, agents or authorised representatives.
- 6.2 Save as provided in Clause 6.1, the Supplier shall not be liable to the Client for any loss or damage whatsoever or howsoever caused arising directly or indirectly in connection with this Agreement, the Services or otherwise
- 6.3 Without prejudice to Clause 6.2, the Supplier expressly excludes liability for, without limitation, any indirect, special, incidental or consequential loss or damage which may arise in respect of the Services, or for loss of profit, data, business, revenue, goodwill or anticipated savings and whether or not the Supplier shall have been aware or not of the likelihood of any such loss or damage as aforesaid.
- 6.4 In the event that any exclusion contained in this Agreement shall be held to be invalid for any reason and the Supplier becomes liable for loss or damage that may lawfully be limited, the total aggregate liability of the Supplier shall be limited to the Trend Monitoring Fees payable under the Agreement for the individual aircraft subject to the above loss or damage for 1 year, but in any event [not more than USD 5,000].
- 6.5 Where a breach by the Supplier is actionable under both this Agreement and the Software Licencing Agreement, the Client agrees that it will only make a claim under this Agreement.
- The Client acknowledges and agrees that the provisions of Clause 6 are fair and reasonable having regard to the nature of the Services.

NOTICE

- Any communication between the Supplier and the Client relating to this Agreement must be in writing and sent by post or
 - (A) to the Client using the details specified in the Enrolment
 - (B) to the Supplier at the following address The Managing Director, Jet-Care, Palace Gate, Odiham, Hampshire, RG29 1NP, UK. and fax number +44-(0)1256-393502
- Such communication shall be deemed to be received:
 - (A) in the case of a posted letter, on the third Business Day
 - (B) in the case of a facsimile, on production of a transmission report from the machine from which the facsimile was sent which indicates that the facsimile was sent in its entirety to the intended recipient
- A communication received or deemed to be received on a day that is not a Business Day shall be deemed to be received on the next Business Day.

VARIATION

- 8.1 Subject to Clause 8.2, no amendment or modification to this Agreement shall be effective unless executed in writing by
- 8.2 The Supplier may vary the Trend Monitoring Fees, such variation shall take effect 30 days after the date on which the Supplier gives written notice to the Client. The Client may terminate this Agreement by notice in writing to the Supplier within 30 days of a notice provided by the Supplier under Clause

DURATION. SUSPENSION AND TERMINATION

- This Agreement shall commence on the date of signature of the Enrolment Form by the Client and shall continue until it is terminated by the Client giving notice under the terms laid out in this agreement. Notice of cancellation must be given in advance of the annual renewal date, being the anniversary of the commencement date
- 9.2 The Supplier may by notice in writing to the Client terminate this Agreement if any of the following events shall
 - (A) if the Client is in breach of any term, condition or provision of this Agreement or required by the applicable law to remedy a breach, and fails to remedy such breach (if capable of remedy) within 30 days of having received written notice of such breach from the Supplier, or
 - (B) if the Client, being a body corporate, shall present a petition or have a petition presented by a creditor for its winding up; shall summons a meeting to pass a resolution for voluntary winding up; shall enter into any liquidation (other than for the purposes of a bona fide reconstruction or amalgamation); shall call a meeting of its creditors; shall have a petition for an administration order presented against it; shall have a receiver, administrative receiver, receiver and manager or similar, of all or any of its undertakings or assets appointed; or shall be deemed by the relevant statutory

Upon termination or expiration of this Agreement, Clauses 12 and 13 shall survive.

ASSIGNABILITY

- 10.1 The Supplier may assign (whether absolutely or by way of security and whether in whole or part), transfer mortgage, charge or otherwise dispose in any manner whatsoever of the benefit of this Agreement or sub-contract or delegate its performance under this Agreement without the prior written consent of the Client.
- 10.2 Subject to Clause 10.3, the Client may not assign or transfer any of the rights or obligations under this Agreement.
- 10.3 In the event of the Client undergoing company restructuring, merger or takeover, the Client may only assign this Agreement with the prior written consent of the Supplier, such consent not to be unreasonably withheld.

FORCE MAJEURE

- 11.1 In this Clause "Force Majeure Event" means, in relation to either party, any act, event or circumstance, the cause of which is not of such party's making nor within that party's reasonable control, including (to the extent not of that party's making nor within that party's reasonable control) Act of God, war, hostilities (whether or not war has been declared), terrorist acts, acts of any civil or military authority, governmental or regulatory direction or restriction, suspension or withdrawal of licences or consents, riot, insurrection, civil commotion, public demonstration, sabotage, acts of vandalism, fire, flood, earthquake, extreme weather conditions, epidemic, explosion, aircraft crashes or things falling from aircraft, release of ionising radiation or contamination by radioactivity, chemical or biological contamination, the order of any court or governmental or regulatory authority, delay in transportation or communications, breakage of or accidental damage to equipment, any strike, lock-out or other industrial trade dispute (not involving solely the employees of that party), structural shift or subsidence, provided always that lack of funds shall not be interpreted as a cause which is not of a party's making nor within a party's reasonable control
- If a party is, or could reasonably be expected to be, materially The party so rectude reasonant by expected to be materials in the prevented, hindered or delayed from performing any of its obligations under this Agreement by reason of a Force Majeure Event, such obligations of the affected party and any corresponding or related obligations of the other party shall remain in effect but shall be suspended without liability for a period equal to the duration of the Force Majeure Event, provided that:
 - (A) within 7 days after the start of the Force Majeure Event the affected party shall notify the other party in writing of the act under Clause 7: and
 - (B) the affected party shall make all reasonable efforts to mitigate the effects of the Force Majeure Event on the performance of its obligations under this Agreement, and provide any information relating to the Force Majeure event and its effects that the other party may reasonably request.

12. CONFIDENTIALITY

Each party undertakes to the other that (unless the prior written consent of the other party shall first have been obtained) it shall, and shall procure that its officers, employees, advisers and agents shall keep confidential and not by failure to exercise due care or otherwise by any act or omission disclose to any person whatever, or use or exploit commercially for its or their own purposes, any of the Confidential Information of the other party.

INTELLECTUAL PROPERTY RIGHTS

The Client acknowledges that as between the Client and the Supplier, any and all of the copyright, database rights, trademarks, trade names, patents and other intellectual property rights arising out of the performance of the Services, including all documentation, are and shall remain the sole property of the Supplier.

GENERAL

- 14. Failure or neglect by the Supplier to enforce at any time any of the provisions hereof shall not be construed nor shall be deemed to be a waiver of the Supplier's rights hereunder nor in any way affect the validity of the whole or any part of this Agreement nor prejudice the Supplier's rights to take subsequent action.
- This Agreement shall constitute the entire agreement between the parties with respect to its subject matter and without prejudice to any liability for fraudulent misrepresentation supersedes all prior and contemporaneous communications, both written and oral
- 16. Each party confirms that, except as provided in this Agreement and without prejudice to any liability for fraudulent misrepresentation, neither of them has relied on any representation or warranty or undertaking which is not contained in this Agreement, or which was made by any other party who is not a party to this Agreement and neither of them shall have any remedy in respect of misrepresentation or untrue statement made by any other party unless and to the extent that a claim lies under this Agreement. that a claim lies under this Agreement.
- 17. Nothing in this Agreement or in any document referred to in it or any arrangement contemplated by it shall constitute either party a partner of the other nor shall the execution, completion and implementation of this Agreement confer on any party any power to bind or impose any obligations to any third parties on the other party.
- 18. No term of this Agreement is enforceable under the Contracts (Rights of Third Parties) Act 1999 by a person who is not a party to this Agreement.
- 19. In the event that any provision of this Agreement shall be void or unenforceable by reason of any provision of applicable law, it shall be deleted and the remaining provisions hereof shall continue in full force and effect and if necessary, be so amended as shall be necessary to give effect to the spirit of this Agreement so far as
- This Agreement shall be construed in accordance with English



TFE 731 ENGINE
TREND MONITORING
2 engine aircraft

CUSTOMER:		JET CARE CODE:	FAX TO
PHONE:		FAX:	US: (1) 973-292-3030
A/C REG	TYPF:	S/N·	UK:+44-1256-701377 ◀

NOTE: FLIGHT DATA IS TO BE RECORDED DURING EVERY FLIGHT, ANTI-ICE OFF (CONSISTENT WITH SAFE OPS), DURING STABLE CRUISE (FIVE MINUTES AFTER STABILIZED CRUISE SPEED IS ATTAINED). *Both if convenient

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				Engine Tot. Cycles
				JC ONLY
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JC22 Issue 2 SEP 27, 2006

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TFE 731 ENGINE
TREND MONITORING
3 engine aircraft

CUSTOMER:		JET CARE CODE	FAX TO
PHONE:		FAX:	US: (1) 973-292-3030 ◀
A/C REG:	TYPE:	S/N:	WK: +44-1256-701377 ◀

NOTE: FLIGHT DATA IS TO BE RECORDED DURING EVERY FLIGHT, ANTI-ICE OFF (CONSISTENT WITH SAFE OPS), DURING STABLE CRUISE (FIVE MINUTES AFTER STABILIZED CRUISE SPEED IS ATTAINED).

*Both if convenient

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SEP 27, 2006

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TFE 731 ENGINE TREND MONITORING 4 engine aircraft

CUSTOMER:		JET CARE CODE:	FAX TO				
PHONE:		FAX:	US: (1) 973-292-3030				
A/C REG:	TYPE:	S/N:	UK: +44-1256-701377 ◀				

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									Engine Tot. Cycles			 		
JC ONLY														
										JC25 Issue 2				

SEP 27, 2006



CONDITION MONITORING EXCELLENCE

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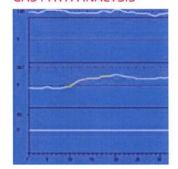
BLEED AIR LEAKS ON CITATION III

Highlighted increase in engine ITT, Inter-Turbine Temperature, leads to early correction.

INTRODUCTION

An operator had previously had an advisory due to a single parameter change. Jet-Care requested information as to whether any maintenance had been carried out on the aircraft or engines. The operator reported that no work had been carried out.

GAS PATH ANALYSIS



Further to our advisory e-mail (kneepad data), an earlier telephone conversation and our customer's DEEC download, we confirmed a significant increase of #1 Engine ITT (+15C).

Knowing no maintenance had been carried out, we recommended early investigation for:

- Probable bleed air leaks/ valve operations.
- Possible hot section distress/damage (if no clear sign of Bleed air problem).

ACTION/FOLLOW UP

The customer discovered a severe bleed air leak in the HP system, corrected all leaks and performed five point runs. The aircraft engine temperatures were well within limits and the #1 Engine was now actually running cooler than the #2..

The bleed leaks were in the airframe pre-cooler assembly on top of the engine. There are some flexible bellows that attach the bleed airlines to the pre-cooler. Both of these bellows were leaking. One was completely blown out and the other was leaking around the seam weld. The pre-cooler itself was also leaking when it was pressure tested off of the engine. So both bellow lines and the pre-cooler were replaced. This brought the ITT back to well within limits.

CONCLUSION:

Besides bringing the engine temperatures back to within limits, bleed leaks can, if uncorrected, cause extensive and expensive damage to engines, cowling and wiring.







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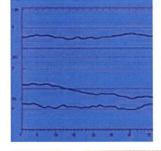
ITT DROP INDICATION

Decrease in ITT prior to planned maintenance work, helps find unexpected part failure and optimises downtime.

INTRODUCTION

The aircraft was due in maintenance for two weeks during which the Honeywell Service Bulletin SB 76-5121 (Replacement/Upgrade of the DEEC's) was to be embodied. Prior to the work being carried out, the SB requires that a DEEC download is carried out.

GAS PATH ANALYSIS



The analysis of the trend from the engine showed a gradual decrease in ITT through out the period covered by the download This was worth looking at while the engine was down for maintenance.

ACTION/FOLLOW UP

Investigation of the ITT system revealed curling of most of the ITT probe tips as shown in the photographs. The entire harness was replaced.

CONCLUSION:

The engine was saved from continued operation with defective temperature indication, which could have impacted engine reliability, safety and cost of operation.









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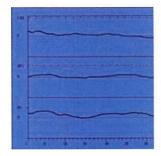
TURBINE RUB DAMAGE

Early detection of ITT and N2 trend changes lead to prompt and cost efficient repair with minimum operation disruption.

INTRODUCTION

Following a routine DEEC download, Jet-care issued a warning to an operator.

GAS PATH ANALYSIS



We observed a rapid increase in ITT of almost 60°C and a decrease in N2 of around 3.5% on the #1 Engine over the last four flights of the download data. We strongly recommended that the customer investigated this change as a matter of urgency as this type of trend could indicate genuine engine hot end deterioration.

ACTION/FOLLOW UP

The aircraft was ferried to a maintenance shop for investigation. Turbine entry found High Pressure shroud failure with heavy secondary damage caused by debris.

CONCLUSION:

The operator was provided with the information to enable it to schedule the repair. Without this information the aircraft could easily have become grounded due to performance issues during a scheduled flight, ending in passenger disruption, high costs of shipping and staff movements to replace the engine.





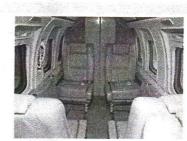


1982 WESTWIND II S/N 368 N83SG











TOTAL TIME AIRFRAME: 8890 LANDINGS: 6420 (Oct-06)

ENGINES: 8480/8778 TT 469/912 SMPI 333/2308 SCORE MSP GOLD

AVIONICS:

Flight Director: Collins FDS-85

Comms: **Dual Collins VHF-20B** Navs: **Dual Collins VIR-30A**

Transponders: Dual Collins TDR-90 **Dual Collins RMI 36**

Weather Radar:

Collins WXR-300 Wulfsberg RT-18 Flite Fone:

HF:

Collins HF-220/CTL-220

Auto Pilot:

Collins APS-80 ADF: Collins ADF-60A

Radar Alt: CVR:

Collins ALT-50A Fairchild GA-100 **Dual Collins DME-40**

DME: FMS:

Dual Univ. UNS-1M

Emer. Gyro:

Jet Al-804B

TAWS:

8100 Class B

ADDITIONAL EQUIPMENT:

Collins Flight Profile Advisory

B & D Cabin Display

Dual Daytron Clocks

Belted Potty

INTERIOR:

The cabin is equipped with five individual executive seats and a three place couch covered in beige leather. There is a refreshment center and ample storage cabinets. The four place club has two large writing tables. The fully enclosed lavatory is located in the rear of the cabin. Refurbished by Penta in 1998, good condition. Carpet replaced in Sept. 2006.

EXTERIOR:

Upper white, lower black with gold stripes. Refurbished by Murmer Aircraft in September 2006, excellent condition.

REMARKS:

The last "C" check was done by Aviation Services Unlimited (Wayne O'berg) less than 10 hours ago. This RVSM compliant aircraft is currently being operated on a Part 135 certificate. An excellent, late model Westwind II. Asking Price: \$1,995,000.

Specifications Subject to Verification Upon Inspection