

ExpressoLivre - ExpressoMail

Enviado por: "Grupamento de Aviacao Operacional - 1 Esquadrao" <gavop.1esquadrao@cbm.df.gov.br>

De: gavop.1esquadrao@cbm.df.gov.br

Para: scott@paraletelifesupport.com

Data: 10/12/2019 21:01

Assunto: Urgent Documents  



Good night,

I'm Captain Hugo of the Federal District Military Fire Department. We are in the process of acquiring helmets in which the QUARTZO company is competing with the helmet manufactured by you. However the tests presented by the company are diverging information, because the tests were performed before the equipment calibration. Therefore, I request the original tests of the helmets so that we can remedy the differences.

**CORPO DE BOMBEIROS MILITAR DO DISTRITO FEDERAL
GRUPAMENTO DE AVIAÇÃO OPERACIONAL
“Brasília – Patrimônio da Humanidade”**

Hangar Soldado Alberto F Fonseca – SAM Lote D Módulo E CEP 70.620-000 – GavOp
E-mail: gavop.1esquadrao@cbm.df.gov.br – Telefone: (061) 3901-8652

ExpressoLivre - ExpressoMail

Enviado por: "Terry A. Smith" <tas@dynres.com>
De: tas@dynres.com
Para: "Scott Hedges" <scott@paracletelifesupport.com>, "CARLOS ALBERTO MARTINS CANO" <carloscano@quartzoengdef.com.br>, "gavop.1esquadrao@cbm.df.gov.br" <gavop.1esquadrao@cbm.df.gov.br>
Data: 12/12/2019 14:41 (58 minutos atrás)
Assunto: RE: DRI TM-17-132-1 Test Report 165-74-2 Paraclete Aviation.docx  
Anexos: | Remover anexos | 2017_DRI Asset 2002 Uniaxial Accelerometer PCB Model 353B18 SN 109429.pdf (640 KB) | 2016_DRI Asset 2002 Uniaxial Accelerometer PCB Model 353B18 SN 109429.pdf (64 KB)

Hi Scott,

I now understand ---

At DRI, we produce helmet test reports regularly and part of my job as the manager of the impact test laboratory is to regularly update the test report templates with the most current calibration information. The original report which we sent to you was dated July 2017 and as the report originally indicated, the accelerometer had been calibrated in February 2017. We had clearly updated our test report template by that time and unfortunately we did not notice the difference between the original testing date (January 2017) and the new accelerometer calibration date, which actually occurred after the testing, but before the July 2017 report publication date.

In accordance with our ISO 17025 accreditation, we must calibrate our accelerometers on an annual basis. Consequently, the actual calibration date which would have been valid for Paraclete testing which took place in January 2017 would have been February 2016. I have attached copies of both calibration the 2016 and 2017 calibration certificates to confirm our annual calibration practice.

The latest report TM-17-132-1 now reflects this new and correct calibration date relative to the January 2017 testing.

Please let me know if you have any questions.

Best Regards,

Terry

From: Scott Hedges <scott@paracletelifesupport.com>

Sent: Thursday, December 12, 2019 8:38 AM

To: Terry A. Smith <tas@dynres.com>; CARLOS ALBERTO MARTINS CANO <carloscano@quartzoengdef.com.br>; gavop.1esquadrao@cbm.df.gov.br

Subject: Re: DRI TM-17-132-1 Test Report 165-74-2 Paraclete Aviation.docx

[EXTERNAL EMAIL]

Terry,

Sorry for my poor communication. Last night you sent me the updated test report with an explanation of why there was a mistake in the original document between the test date and the calibration date. Would you please provide this explanation for Captain Hugo?

Best,

J. Scott Hedges

President

12/12/2019

Paraclete Aviation Life Support

1792 Alpine Dr.

Clarksville, TN 37040

Office: (931) 274-7947

Cell: (931) 302-8383

paracletelivesupport.com

From: Terry A. Smith <tas@dynres.com>

Sent: Thursday, December 12, 2019 10:34 AM

To: Scott Hedges <scott@paracletelivesupport.com>; CARLOS ALBERTO MARTINS CANO <carloscano@quartzoengdef.com.br>; gavop.1esquadrao@cbm.df.gov.br <gavop.1esquadrao@cbm.df.gov.br>

Subject: RE: DRI TM-17-132-1 Test Report 165-74-2 Paraclete Aviation.docx

Hello Scott, Carlos and Captain Hugo,

Here is an explanation of the differences between the calibration tests and the impact tests on the paraclete helmet.

The calibration tests or System Check results are designed to confirm that the system performed properly prior to testing the Paraclete helmets and continue to perform properly after the testing of the Paraclete helmets. It is a test of our monorail drop system and does not include any test helmet. The calibration tests (pre-test and post-test) involves dropping a bare size medium headform (no helmet) at an impact velocity of 5.2 m/s onto a 1" Modular Elastomeric Pad (MEP). In accordance with the standard, we must be able to show that the system can report peak g's in excess of 400, which we do.

Once we confirm that the system can report peak g values above 400g, we may then initiate impact testing with the Paraclete helmets. This testing is performed with a Paraclete helmet mounted onto the test headform and the impact surface is a flat anvil, in accordance with the test standard. As indicated at the beginning of the report, the target impact velocity is 19.6 ft/s (except for the crown impact location which is 16.0 ft/s). The maximum allowable acceleration for any given impact test is 250 g and as the data indicates, the Paraclete helmet met this requirement.

Upon completion of all helmet testing, we then perform the post test using the exact same test conditions that were used for the pre-test (e.g. bare headform, MEP pad, same impact velocity). The difference between the pre and post test averages are not allowed to exceed 15% --- if they do exceed 15% then the test data collected is considered invalid. As the results indicate in report TM-17-132-1, there was a 9% difference between the pre-test data and the post-test data. This is acceptable according to the standard – thus the test data is considered valid.

I hope that this helps explain the difference between the pre-test/post-test (calibration) testing as well as the formal helmet impact tests.

Please don't hesitate to contact me if you have any questions.

Best Regards,

Terry

From: Scott Hedges <scott@paracletelivesupport.com>

Sent: Thursday, December 12, 2019 8:08 AM

To: Terry A. Smith <tas@dynres.com>; CARLOS ALBERTO MARTINS CANO <carloscano@quartzoengdef.com.br>

Subject: Re: DRI TM-17-132-1 Test Report 165-74-2 Paraclete Aviation.docx

[EXTERNAL EMAIL]

Terry,

Would you please send an email of your explanation for the difference in the test and calibration tests to:
Captain Hugo at gavop.1esquadrao@cbm.df.gov.br

He is the authority with the Brazilian organization to whom we originally submitted the test report.

Best,

J. Scott Hedges

President

Paraclete Aviation Life Support

1792 Alpine Dr.

Clarksville, TN 37040

Office: (931) 274-7947

Cell: (931) 302-8383

paracletelifesupport.com



Aproximadamente 20.600.000 resultados (0,35 segundos)

Inglês ▾



Português ▾

Hi Scott,



Olá Scott,

I now understand

Agora eu entendo ---

At DRI, we produce helmet test reports regularly and part of my job as the manager of the impact test laboratory is to regularly update the test report templates with the most current calibration information. The original report which we sent to you was dated July 2017 and as the report originally indicated, the accelerometer had been calibrated in February 2017. We had clearly updated our test report template by

Na DRI, produzimos relatórios de teste de capacete regularmente e parte do meu trabalho como gerente do laboratório de teste de impacto é atualizar regularmente os modelos de relatório de teste com as informações mais recentes de calibração. O relatório original que lhe enviamos era datado de julho de 2017 e, como indicado originalmente, o acelerômetro foi calibrado em fevereiro de 2017. Atualizamos claramente nosso modelo de relatório de teste naquele momento e, infelizmente, não percebemos a diferença entre o original data do teste

that time and unfortunately we did not notice the difference between the original testing date (January 2017) and the new accelerometer calibration date, which actually occurred after the testing, but before the July 2017 report publication date.

In accordance with our ISO 17025 accreditation, we must calibrate our accelerometers on an annual basis. Consequently, the actual calibration date which would have been valid for Paraclete testing which took place in January 2017 would have been February 2016. I have attached copies of both calibration the 2016 and 2017 calibration certificates to confirm our annual calibration

(janeiro de 2017) e a nova data de calibração do acelerômetro, que realmente ocorreu após o teste, mas antes da data de publicação do relatório de julho de 2017.

De acordo com nossa certificação ISO 17025, devemos calibrar nossos acelerômetros anualmente.

Consequentemente, a data de calibração real que seria válida para o teste Paraclete ocorrida em janeiro de 2017 seria em fevereiro de 2016. Anexei cópias de ambos os certificados de calibração de 2016 e 2017 para confirmar nossa prática anual de calibração.

O último relatório TM-17-132-1 agora reflete essa nova e correta data de calibração em relação aos testes de janeiro de 2017.



Precision Labs

32124 Paseo Adelanto, Suite 3
San Juan Capistrano, CA 92675
Ph: (949) 606-4780 www.plcal.com

Calibration Certificate

Temperature (deg C): 22
Relative Humidity (%): 31

Document number: 15116
Customer ID: 2002
Description: Accelerometer
Manufacturer: PCB
Model Number: 353B18
Serial Number: 109429

Customer Name: DYNAMIC RESEARCH INC.
Address: 355 VAN NESS AVE, SUITE 200
City/State/Zip: TORRANCE, CA 90501
Phone: (310) 212-5211
Purchase Order: T.SMITH
Work Order: 62362

Bias (V): 8.7

Sensitivity:

9.742 mV/g @ 100 Hz 10 g pk
0.9934 mV/ m/s² @ 100 Hz, 98 m/s² pk

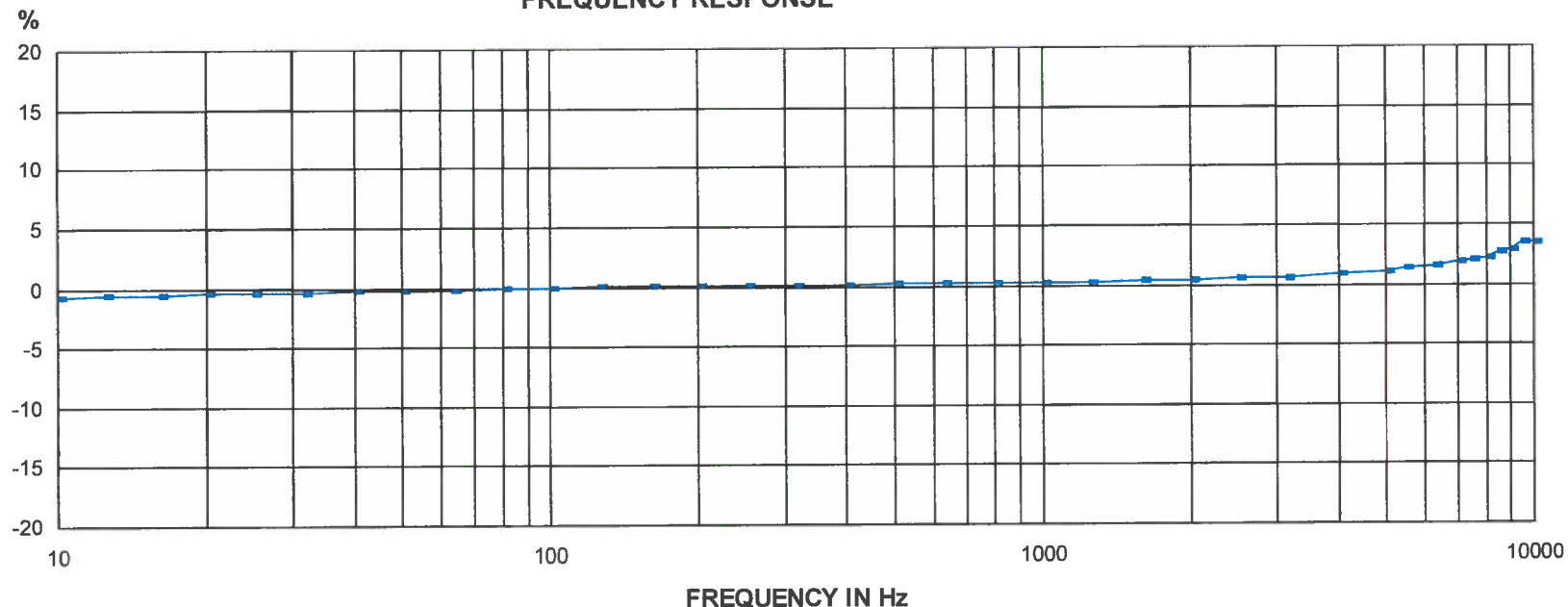
Calibration Date: 2/3/2016

Excitation: 4.0 mA

DATA AS FOUND AS LEFT

Notes:

FREQUENCY RESPONSE



Precision Labs certifies that the above instrument was calibrated using comparison method per ISO/IEC 16063-21 using Endevco 68357. This calibration is traceable to the National Institute of Standards and Technology and is in accordance with ISO 17025-2005, ANSI/NC SL Z540-1-1994, ISO 10012-3 and ISO 9001-2000.

Console serial number: PL01
Equipment used: 1000AD
Ref Manufacturer: PCB
Ref Model number: 301M24
Ref Serial number: 1308

Uncertainty estimate (95% confidence, k=2)

+/- 1.3 % 100.0 Hz Sensitivity
+/- 1.6 % 10.0 < f <= 100.0 Hz
+/- 1.3 % 100.0 < f <= 2500.0 Hz
+/- 2.6 % 2500.0 < f <= 10000.0 Hz
+/- 5.1 % 10000.0 < f <= 15000.0 Hz

By: C. Romero
C. Romero, Tech
2/3/2016



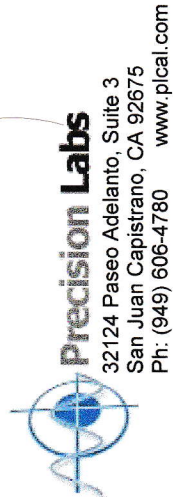
CALIBRATION CERT #2405.01

Test Name: VC-1 DRI
Report Form: PL421-10K Rev A

Precision Labs, LLC

s/w 7.03

This certificate shall not be reproduced, except in full, without the written approval of Precision Labs.



Calibration Certificate

Temperature (deg C): 22
 Relative Humidity (%): 42

Document number: 16796
 Customer ID: 2002
 Description: Accelerometer
 Manufacturer: PCB
 Model Number: 353B18
 Serial Number: 109429

Customer Name: DYNAMIC RESEARCH INC.
 Address: 355 VAN NESS AVE, SUITE 200
 City/State/Zip: TORRANCE, CA 90501
 Phone: (310) 212-5211
 Purchase Order: 62565
 Work Order: 2/15/2017

Bias (V): 8.7

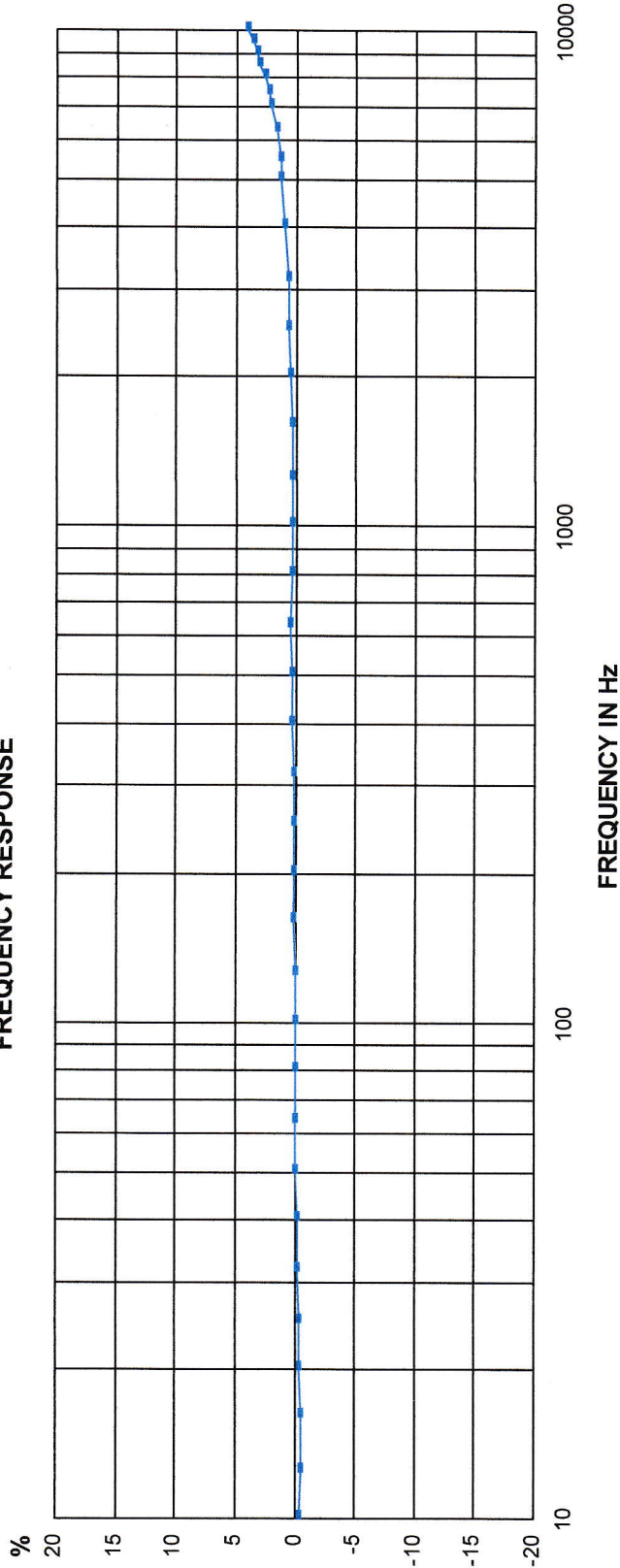
Sensitivity:

9.752 mV/g @ 100 Hz 10 g pk
 0.9944 mV/ m/s² @ 100 Hz, 98 m/s² pk

Excitation: 4.0 mA

Notes: DATA AS FOUND AS LEFT

FREQUENCY RESPONSE



Precision Labs certifies that the above instrument was calibrated using comparison method per ISO/IEC 16063-21 using Endevo 68357. This calibration is traceable to the National Institute of Standards and Technology and is in accordance with ISO 17025-2005, ANSI/NCSL Z540-1-1994, ISO 10012-3 and ISO 9001-2000.

Console serial number: PL01
 Equipment used: 1000AD
 Ref Manufacturer: PCB
 Ref Model number: 301M24
 Ref Serial number: 1308

Uncertainty estimate (95% confidence, k=2)

+/- 1.3 % 100.0 Hz Sensitivity
 +/- 1.6 % 10.0 < f <= 100.0 Hz
 +/- 1.3 % 100.0 < f <= 2500.0 Hz
 +/- 2.6 % 2500.0 < f <= 10000.0 Hz
 +/- 5.1 % 10000.0 < f <= 15000.0 Hz

By: C. Romero
 C. Romero, Tech
 2/15/2017

Test Name: VC-1 DRI
 Report Form: PL421-10K Rev A

Precision Labs, LLC s/w 7.03



CALIBRATION CERT #2405.01