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| Traveler Title | Dog Bone Field Probe Fabrication Traveler | | | |
| Traveler Abstract | Outlines the inspection and fabrication steps for the Dog Bone Field Probe Assembly for the EIC 197MHz Crab Cavity Prototype | | | |
| Traveler ID | EIC197-FAB-FPWA-ASSY | | | |
| Traveler Revision | R1 | | | |
| Traveler Author | JACQUESB | | | |
| Traveler Date | 28-Aug-24 | | | |
| NCR Informative Emails | AREILLY, GEORGED, MOSBY, KDAVIS | | | |
| NCR Dispositioners | HUQUE, JACQUESB, BUTTLES | | | |
| D3 Emails | HUQUE, JACQUESB, BUTTLES, KDAVIS, GEORGED, MOSBY, AREILLY | | | |
| Approval Names | J. BARSIMANTOV | A. O'BRIEN | J. BUTTLES | N. HUQUE |
| Approval Signatures |  |  |  |  |
| Approval Dates |  |  |  |  |
| Approval Title | Author | Reviewer | Group Leader | Project Manager |

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| References | List and Hyperlink all documents related to this traveler. This includes, but is not limited to: safety (THAs, SOPs, etc), drawings, procedures, and facility related documents. | | | |
| [JL0132256](https://misportal.jlab.org/jlabDocs/documents/186505/download) | [JL0140270](https://misportal.jlab.org/jlabDocs/documents/175650/download) | [JL0146295](https://misportal.jlab.org/jlabDocs/documents/183865/download) | [JL0140269](https://misportal.jlab.org/jlabDocs/documents/175540/download) | [11141-S-0033](https://misportal.jlab.org/jlabDocs/documents/70285/download) |
| [Fabrication Plan](https://jeffersonlab.sharepoint.com/:p:/r/sites/EICPartnerProject-TJNAF/Accelerator/RF%20Systems/Cryomodules/197%20MHz%20DVC/Cavity%20Fabrication%20Files/Fabrication%20Plans/Dogbone%20Field%20Probe%20Fabrication%20Plan.pptx?d=we2f77b80a09a4c9db5787a243e2a8fea&csf=1&web=1&e=jXJ27c) |  |  |  |  |
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| Revision Note |  |
| R1 | Initial release of this Traveler. |

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| Step No. | Instructions | Data Input |
| PART IDENTIFICATION | | |
| 0 | Enter Serial Number of Finished Part   |  |  |  | | --- | --- | --- | | **STEPS** | **WORK CENTER AREAS** | **ACTIONS** | | 1 | MACHSHOP | Part creation | | 2 | CHEM | DEGR | | 3 | INSP | CMM | | 4 | CHEM | BCP | | 5 | EBW | EBW | | 6 | CMA | Leak Check | | 7 | CHEM | DEGR | | 8 | INSP | CMM | | [[FPWASN]] << FPWASN >> |

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| Step No. | Instructions | Data Input |
| MACHINING | | |
| 1 | Include job number. | [[MachTech]] <<SRF>>  [[MachTime]] <<TIMESTAMP>>  [[MachJobNumber]] <<INTEGER>>  [[MachComm]] <<COMMENT>> |

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| Step No. | Instructions | Data Input |
| CHEMISTRY | | |
| 2 | Degrease [JL0132256](https://misportal.jlab.org/jlabDocs/documents/186505/download)  Upload any relevant photos and/or comments | [[ChemTech1]] <<SRF>>  [[ChemTime1]] <<TIMESTAMP>>  [[ChemComm1]] <<COMMENT>>  [[ChemFile1]] <<FILEUPLOAD>> |

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| Step No. | Instructions | Data Input |
| DIMENSIONAL INSPECTION | | |
| 3 | Verify dimensions in red. May use any surface as datum | [[SurfaceInspTech1]] <<SRF>>  [[SurfaceInspDate1]] <<TIMESTAMP>>  [[SurfaceInspComment1]] <<COMMENT>>  [[SurfaceInspFile1]] <<FILEUPLOAD>> |

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| Step No. | Instructions | Data Input |
| CHEMISTRY | | |
| 4 | BCP weld region to a depth of 15 microns [JL0132256](https://misportal.jlab.org/jlabDocs/documents/186505/download)  What is your Weld Region? Chem will need to know.  According to [CP-AUP-CAV-CHEM-ACID](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-260914/CP-AUP-CAV-CHEM-ACID-R2(2).pdf) Acid Etching Proceedure | [[ChemTech2]] <<SRFCVP>>  [[ChemTime2]] <<TIMESTAMP>>  [[ChemComm2]] <<COMMENT>>  [[ChemFile2]] <<FILEUPLOAD>> |
| BCP weld region to a depth of 15 microns [JL0140270](https://misportal.jlab.org/jlabDocs/documents/175650/download)  According to [CP-AUP-CAV-CHEM-ACID](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-260914/CP-AUP-CAV-CHEM-ACID-R2(2).pdf) Acid Etching Proceedure | [[ChemTech3]] <<SRFCVP>>  [[ChemTime3]] <<TIMESTAMP>>  [[ChemComm3]] <<COMMENT>>  [[ChemFile3]] <<FILEUPLOAD>> |

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| Step No. | Instructions | Data Input |
| EBW | | |
| 5 | Using fixture [JL0146295](https://misportal.jlab.org/jlabDocs/documents/183865/download), EBW [JL0146295](https://misportal.jlab.org/jlabDocs/documents/183865/download) to [JL0132256](https://misportal.jlab.org/jlabDocs/documents/186505/download) to create part [JL0140269](https://misportal.jlab.org/jlabDocs/documents/175540/download) | [[PUGWSN]] << PUGWSN >>  [[InsTech1]] <<SRF>>  [[InsTime1]] <<TIMESTAMP>>  [[InsComm1]] <<COMMENT>>  [[InsFile1]] <<FILEUPLOAD>> |

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| **Step No** | **Instructions** | **Data Inputs** |
| LEAK CHECK | | |
| 6 | Leak check the assembly [JL0140269](https://misportal.jlab.org/jlabDocs/documents/175540/download) in accordance with [11141-S-0033](https://misportal.jlab.org/jlabDocs/documents/70285/download) Vendor Standard Helium Leak Check Procedure  Upload any relevant images/comments | [[VacTech]] <<SRF>>  [[VacTime]] <<TIMESTAMP>>  [[VacPass]] <<YESNO>>  [[VacComm]] <<COMMENT>>  [[VacFile]] <<FILEUPLOAD>>  [[VacMail]] {{jacquesb}} <<EMAIL>>  [[VacMail]] {{Leak check on [JL0140269](https://misportal.jlab.org/jlabDocs/documents/175540/download) has finished}} <<EMAILSUBJ>> |

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| Step No. | Instructions | Data Input |
| CHEMISTRY | | |
| 7 | Degrease [JL0140269](https://misportal.jlab.org/jlabDocs/documents/175540/download)  According to [CP-AUP-CAV-CHEM-ACID](https://jlabdoc.jlab.org/docushare/dsweb/Get/Document-260914/CP-AUP-CAV-CHEM-ACID-R2(2).pdf) Acid Etching Proceedure  Upload any relevant photos and/or comments | [[ChemTech4]] <<SRF>>  [[ChemTime4]] <<TIMESTAMP>>  [[ChemComm4]] <<COMMENT>>  [[ChemFile4]] <<FILEUPLOAD>> |

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| Step No. | Instructions | Data Input |
| CMM | | |
| 8a | Verify parallelism of flange with respect to datum B | [[ParallelismInspTech2]] <<SRF>>  [[ParallelismInspDate2]] <<TIMESTAMP>>  [[ParallelismInspComment2]] <<COMMENT>>  [[ParallelismInspFile2]] <<FILEUPLOAD>> |
| 8b | Verify perpendicularism of flange with respect to datum A | [[PerpendicularismInspTech3]] <<SRF>>  [[PerpendicularismInspDate3]] <<TIMESTAMP>>  [[PerpendicularismInspComment3]] <<COMMENT>>  [[PerpendicularismInspFile3]] <<FILEUPLOAD>> |
| 8c | Verify locations of holes of flange | [[FlangeInspTech4]] <<SRF>>  [[FlangeInspDate4]] <<TIMESTAMP>>  [[FlangeInspComment4]] <<COMMENT>>  [[FlangeInspFile4]] <<FILEUPLOAD>> |

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| **Step No** | **Instructions** | **Data Inputs** |
| TECHNICAL REPRESENTATIVE | | |
| 9 | Enter SRF OPS Shipping form number and Purchase Requisition number for ultrasonic testing. | [[TechRep]] <<SRF>>  [[ShippingFormNumber]] <<INTEGER>>  [[PurchaseRequestNumber]] <<INTEGER>> |