

| CRYOMODULE REPORT |                  |                                                                                    |
|-------------------|------------------|------------------------------------------------------------------------------------|
| CMSN              | J1.3-20          |                                                                                    |
| ASSY-FRST         |                  | <a href="#">21</a> ● ( ) [ ]                                                       |
| ASSY-SCND         |                  | <a href="#">20</a> ● ( ) [ ]                                                       |
| ASSY-VV           |                  | <a href="#">18</a> ● ( ) [ ]                                                       |
| ASSY-FNAL         |                  | <a href="#">23</a> ● ( ) [ ]                                                       |
| ASSY-REW          |                  | ( ) [ ]                                                                            |
| ASSY-RFIT         |                  | ( ) [ ]                                                                            |
| ACTS-PREP         |                  | ( ) [ ]                                                                            |
| ACTS              |                  | <a href="#">3</a> ● ( ) [ ]                                                        |
| ASSY-SHIP         |                  | <a href="#">22</a> ● ( ) [ ]                                                       |
| UCM               | RFCG-UC-039      | I: <a href="#">17</a> ● ( )<br>DMAG <a href="#">18</a> ● ( )                       |
| VV                | RFCG-VV-028      | I: <a href="#">13</a> ● ( <a href="#">1469</a> ● )<br>DMAG <a href="#">9</a> ● ( ) |
| MAG               | SPQA136          | I: <a href="#">21</a> ● ( ) [ ]<br>R: ( )                                          |
| JTValve6          | 222359-130-03-26 | I: ( )<br>R: <a href="#">31</a> ● ( )                                              |
| JTValve10         | 222359-120-03-22 | I: ( )<br>R: ( )                                                                   |
| IP75SD            | 302751504        |                                                                                    |

|                   | 1                                                                                                   | 2                                                                                                   | 3                                                                                                   | 4                                                                                                   | 5                                                                                                   | 6                                                                                                   | 7                                                                                                   | 8                                                                                                   |
|-------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| BPM FeedThru      | 135<br>R: <a href="#">13</a> ●<br>I: <a href="#">45</a> ● ( )                                       | 141<br>R: <a href="#">16</a> ●<br>I: <a href="#">48</a> ● ( )                                       | 164<br>R: <a href="#">17</a> ●<br>I: <a href="#">55</a> ● ( )                                       | 130<br>R: <a href="#">28</a> ●<br>I: <a href="#">41</a> ● ( )                                       |                                                                                                     |                                                                                                     |                                                                                                     |                                                                                                     |
| FPCWarm           | RITH-S-WP-129<br>I: <a href="#">68</a> ● ( )<br>R: <a href="#">35</a> ●<br>A: <a href="#">174</a> ● | RITH-S-WP-150<br>I: <a href="#">66</a> ● ( )<br>R: <a href="#">37</a> ●<br>A: <a href="#">175</a> ● | RITH-S-WP-167<br>I: <a href="#">65</a> ● ( )<br>R: <a href="#">38</a> ●<br>A: <a href="#">176</a> ● | RITH-S-WP-165<br>I: <a href="#">64</a> ● ( )<br>R: <a href="#">38</a> ●<br>A: <a href="#">177</a> ● | RITH-S-WP-131<br>I: <a href="#">40</a> ● ( )<br>R: <a href="#">29</a> ●<br>A: <a href="#">178</a> ● | RITH-S-WP-127<br>I: <a href="#">38</a> ● ( )<br>R: <a href="#">28</a> ●<br>A: <a href="#">179</a> ● | RITH-S-WP-103<br>I: <a href="#">37</a> ● ( )<br>R: <a href="#">31</a> ●<br>A: <a href="#">180</a> ● | RITH-S-WP-130<br>I: <a href="#">34</a> ● ( )<br>R: <a href="#">30</a> ●<br>A: <a href="#">181</a> ● |
| FPCWG             | 0233<br>I: <a href="#">123</a> ●<br>R:                                                              | 0234<br>I: <a href="#">124</a> ●<br>R:                                                              | 0235<br>I: <a href="#">125</a> ●<br>R:                                                              | 0236<br>I: <a href="#">126</a> ●<br>R:                                                              | 0237<br>I: <a href="#">127</a> ●<br>R:                                                              | 0238<br>I: <a href="#">128</a> ●<br>R:                                                              | 0239<br>I: <a href="#">129</a> ●<br>R:                                                              | 0240<br>I: <a href="#">130</a> ●<br>R:                                                              |
| Tuner Piezo LOWER | 118018091<br>I: ( )<br>R: <a href="#">227</a> ●                                                     | 118018104<br>I: ( )<br>R: <a href="#">222</a> ●                                                     | 118018087<br>I: ( )<br>R: <a href="#">216</a> ●                                                     | 118018089<br>I: ( )<br>R: <a href="#">223</a> ●                                                     | 118018110<br>I: ( )<br>R: <a href="#">228</a> ●                                                     | 118019168<br>I: ( )<br>R: <a href="#">229</a> ●                                                     | 118018106<br>I: ( )<br>R: <a href="#">218</a> ●                                                     | 118018108<br>I: ( )<br>R: <a href="#">226</a> ●                                                     |
| Tuner Piezo UPPER | 118018090<br>I: ( )<br>R: <a href="#">231</a> ●                                                     | 118018092<br>I: ( )<br>R: <a href="#">224</a> ●                                                     | 118018086<br>I: ( )<br>R: <a href="#">219</a> ●                                                     | 118018088<br>I: ( )<br>R: <a href="#">217</a> ●                                                     | 118018109<br>I: ( )<br>R: <a href="#">225</a> ●                                                     | 118018118<br>I: ( )<br>R: <a href="#">230</a> ●                                                     | 118018105<br>I: ( )<br>R: <a href="#">220</a> ●                                                     | 118018107<br>I: ( )<br>R: <a href="#">221</a> ●                                                     |
| Tuner Motor TUNMT | 171250645<br>I: ( )<br>R: <a href="#">163</a> ●                                                     | 171250616<br>I: ( )<br>R: <a href="#">147</a> ●                                                     | 171250633<br>I: ( )<br>R: <a href="#">142</a> ●                                                     | 171250629<br>I: ( )<br>R: <a href="#">141</a> ●                                                     | 171250647<br>I: ( )<br>R: <a href="#">144</a> ●                                                     | 171250615<br>I: ( )<br>R: <a href="#">146</a> ●                                                     | 171250649<br>I: ( )<br>R: <a href="#">145</a> ●                                                     | 171250644<br>I: ( )<br>R: <a href="#">149</a> ●                                                     |
| Tuner Mech TUNMC  | 0213X<br>I: ( )<br>R: <a href="#">131</a> ●                                                         | 0236<br>I: ( )<br>R: <a href="#">140</a> ●                                                          | 0193<br>I: ( )<br>R: <a href="#">121</a> ●                                                          | 0274<br>I: ( )<br>R: <a href="#">163</a> ●                                                          | 0238<br>I: ( )<br>R: <a href="#">142</a> ●                                                          | 0194<br>I: ( )<br>R: <a href="#">137</a> ●                                                          | 0234<br>I: ( )<br>R: <a href="#">138</a> ●                                                          | 0281<br>I: ( )<br>R: <a href="#">170</a> ●                                                          |

# CAVITY STRING REPORT

|                              |       |                                                                                                                           |
|------------------------------|-------|---------------------------------------------------------------------------------------------------------------------------|
| CST                          | CST20 |                                                                                                                           |
| CST-ASSY                     |       | <a href="#">25</a> ● <a href="#">26</a> ● ( ) [ ]                                                                         |
| CST LEAK                     |       | <a href="#">22</a> ● ( ) [ <a href="#">222</a> ● ]                                                                        |
| BPM                          | 042   | R:<br>A: <a href="#">23</a> ● ( )                                                                                         |
| BLXD                         | 2008  | R: <a href="#">63</a> ●<br>A: <a href="#">16</a> ● ( <a href="#">727</a> ● <a href="#">728</a> ● <a href="#">1010</a> ● ) |
| AMGV<br>All Metal Gate Valve | 0084  | LEAK <a href="#">27</a> ● ( ) [ ]<br>R: <a href="#">41</a> ●                                                              |

|                       | 1                                                                                                                                                                                                       | 2                                                                                                             | 3                                                                                                                                                          | 4                                                                                                                                    | 5                                                                                                                                                                                  | 6                                                                                                                                                                                                      | 7                                                                                                                                                                                                      | 8                                                                                                                                                            |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FPC<br>Cold           | RITH-S-CP-178<br>I: <a href="#">56</a> ● ( )<br>R: <a href="#">56</a> ● ( )                                                                                                                             | RITH-S-CP-122<br>I: <a href="#">50</a> ● ( )<br>R: <a href="#">58</a> ● ( )                                   | RITH-S-CP-067<br>I: <a href="#">11</a> ● ( )<br>R: <a href="#">9</a> ● ( )                                                                                 | RITH-S-CP-185<br>I: <a href="#">56</a> ● ( )<br>R: <a href="#">56</a> ● ( )                                                          | RITH-S-CP-064<br>I: <a href="#">19</a> ● ( )<br>R: <a href="#">8</a> ● ( )                                                                                                         | RITH-S-CP-092<br>I: <a href="#">17</a> ● ( )<br>R: <a href="#">6</a> ● ( )                                                                                                                             | RITH-S-CP-093<br>I: <a href="#">17</a> ● ( )<br>R: <a href="#">6</a> ● ( )                                                                                                                             | RITH-S-CP-096<br>I: <a href="#">18</a> ● ( )<br>R: <a href="#">7</a> ● ( )                                                                                   |
| BLBP<br>Prd<br>Bellow | 3036<br>I: <a href="#">382</a> ● <a href="#">425</a> ● ( <a href="#">1719</a> ● <a href="#">1720</a> ● <a href="#">1419</a> ● )<br>R: <a href="#">625</a> ● <a href="#">559</a> ● <a href="#">667</a> ● | 2191<br>I: <a href="#">305</a> ● ( <a href="#">1182</a> ● )<br>R: <a href="#">321</a> ● <a href="#">480</a> ● | 3001<br>I: <a href="#">349</a> ● ( <a href="#">1519</a> ● <a href="#">1520</a> ● )<br>R: <a href="#">512</a> ● <a href="#">607</a> ● <a href="#">592</a> ● | 3021<br>I: <a href="#">359</a> ● ( <a href="#">1561</a> ● <a href="#">1562</a> ● )<br>R: <a href="#">521</a> ● <a href="#">598</a> ● | 3038<br>I: <a href="#">384</a> ● ( <a href="#">1667</a> ● <a href="#">1421</a> ● <a href="#">1673</a> ● <a href="#">1659</a> ● )<br>R: <a href="#">656</a> ● <a href="#">561</a> ● | 3056<br>I: <a href="#">400</a> ● <a href="#">436</a> ● ( <a href="#">1744</a> ● <a href="#">1433</a> ● )<br>R: <a href="#">702</a> ● <a href="#">647</a> ● <a href="#">576</a> ● <a href="#">674</a> ● | 3058<br>I: <a href="#">401</a> ● <a href="#">437</a> ● ( <a href="#">1745</a> ● <a href="#">1434</a> ● )<br>R: <a href="#">703</a> ● <a href="#">648</a> ● <a href="#">579</a> ● <a href="#">675</a> ● | 2026 (BLBS)<br>I: <a href="#">33</a> ● ( <a href="#">886</a> ● )<br>R: <a href="#">35</a> ● <a href="#">59</a> ● <a href="#">101</a> ● <a href="#">104</a> ● |
|                       | 1                                                                                                                                                                                                       | 2                                                                                                             | 3                                                                                                                                                          | 4                                                                                                                                    | 5                                                                                                                                                                                  | 6                                                                                                                                                                                                      | 7                                                                                                                                                                                                      | 8                                                                                                                                                            |



| CAVITY REPORT |                                                  |                                                  |                                                                          |                                                                         |                                                                            |                                                                                                                               |                                                                                                                                                      |                                                                                                                                                                               |
|---------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|               | 1                                                | 2                                                | 3                                                                        | 4                                                                       | 5                                                                          | 6                                                                                                                             | 7                                                                                                                                                    | 8                                                                                                                                                                             |
| CAVSN         | 0074                                             | 0159                                             | 0088                                                                     | 0160                                                                    | 0146                                                                       | 0105                                                                                                                          | 0104                                                                                                                                                 | 0109                                                                                                                                                                          |
| I:            | <a href="#">191</a> ● ( <a href="#">1648</a> ● ) | <a href="#">210</a> ● ( <a href="#">1789</a> ● ) | <a href="#">58</a> ● ( )                                                 | <a href="#">211</a> ● ( <a href="#">1795</a> ● <a href="#">1794</a> ● ) | <a href="#">129</a> ● ( )                                                  | <a href="#">203</a> ● ( )                                                                                                     | <a href="#">55</a> ● ( )                                                                                                                             | <a href="#">60</a> ● ( )                                                                                                                                                      |
| RFIN          | <a href="#">185</a> ● ( )                        | <a href="#">207</a> ● ( )                        | <a href="#">49</a> ●<br><a href="#">209</a> ● ( )                        | <a href="#">208</a> ● ( )                                               | <a href="#">121</a> ●<br><a href="#">186</a> ● ( )                         | <a href="#">196</a> ● ( )                                                                                                     | <a href="#">42</a> ●<br><a href="#">213</a> ● ( )                                                                                                    | <a href="#">50</a> ●<br><a href="#">210</a> ● ( )                                                                                                                             |
| HOM           | <a href="#">185</a> ● ( )                        | <a href="#">191</a> ● ( )                        | <a href="#">213</a> ●<br><a href="#">194</a> ● ( )                       | <a href="#">193</a> ● ( )                                               | <a href="#">188</a> ● ( )                                                  | <a href="#">177</a> ● ( )                                                                                                     | <a href="#">30</a> ●<br><a href="#">195</a> ● ( )                                                                                                    | <a href="#">33</a> ●<br><a href="#">196</a> ● ( )                                                                                                                             |
| VTRF          | <a href="#">284</a> ● ( <a href="#">1786</a> ● ) | <a href="#">290</a> ● ( <a href="#">1801</a> ● ) | <a href="#">68</a> ●<br><a href="#">293</a> ● ( <a href="#">1813</a> ● ) | <a href="#">292</a> ● ( <a href="#">1811</a> ● <a href="#">1812</a> ● ) | <a href="#">287</a> ● ( <a href="#">1790</a> ●<br><a href="#">1791</a> ● ) | <a href="#">276</a> ●<br><a href="#">294</a> ● ( <a href="#">1766</a> ●<br><a href="#">1767</a> ●<br><a href="#">1825</a> ● ) | <a href="#">67</a> ●<br><a href="#">296</a> ● ( <a href="#">930</a> ●<br><a href="#">929</a> ●<br><a href="#">1821</a> ●<br><a href="#">1822</a> ● ) | <a href="#">78</a> ●<br><a href="#">295</a> ● ( <a href="#">950</a> ●<br><a href="#">950</a> ●<br><a href="#">951</a> ●<br><a href="#">1819</a> ●<br><a href="#">1820</a> ● ) |
| COOL          | <a href="#">297</a> ●                            | <a href="#">302</a> ●                            | <a href="#">305</a> ●                                                    | <a href="#">303</a> ●                                                   | <a href="#">299</a> ●                                                      | <a href="#">291</a> ●<br><a href="#">309</a> ●                                                                                | <a href="#">68</a> ●<br><a href="#">307</a> ●                                                                                                        | <a href="#">75</a> ●<br><a href="#">308</a> ●                                                                                                                                 |
| TSTD          | <a href="#">29</a> ●                             | <a href="#">30</a> ●                             | <a href="#">31</a> ●                                                     | <a href="#">31</a> ●                                                    |                                                                            | <a href="#">122</a> ● <a href="#">27</a> ●                                                                                    | <a href="#">41</a> ● <a href="#">32</a> ●                                                                                                            | <a href="#">43</a> ● <a href="#">32</a> ●                                                                                                                                     |
| R:            | <a href="#">216</a> ●                            | <a href="#">221</a> ●                            | <a href="#">71</a> ●                                                     | <a href="#">225</a> ●                                                   | <a href="#">133</a> ●                                                      | <a href="#">261</a> ●                                                                                                         | <a href="#">65</a> ●                                                                                                                                 | <a href="#">68</a> ●                                                                                                                                                          |
| HP 1          | <a href="#">79</a> ●                             | <a href="#">165</a> ●                            | <a href="#">94</a> ●                                                     |                                                                         | <a href="#">158</a> ●                                                      | <a href="#">111</a> ●                                                                                                         | <a href="#">109</a> ●                                                                                                                                | <a href="#">113</a> ●                                                                                                                                                         |
| HP 2          | <a href="#">82</a> ●                             | <a href="#">206</a> ●                            | <a href="#">91</a> ●                                                     |                                                                         | <a href="#">147</a> ●                                                      | <a href="#">103</a> ●                                                                                                         | <a href="#">106</a> ●                                                                                                                                | <a href="#">107</a> ●                                                                                                                                                         |
| HP 3          | <a href="#">113</a> ●                            | <a href="#">208</a> ●                            | <a href="#">79</a> ●                                                     |                                                                         | <a href="#">195</a> ●                                                      | <a href="#">121</a> ●                                                                                                         | <a href="#">88</a> ●                                                                                                                                 | <a href="#">93</a> ●                                                                                                                                                          |

|                          | 1                                                                                       | 2                                                                | 3                                                                | 4                                                                | 5                                                                | 6                                                                                       | 7                                                                | 8                                                                |
|--------------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------|------------------------------------------------------------------|------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------|------------------------------------------------------------------|
| HMFTA<br>HOM<br>FeedThru | 0750<br>I: <a href="#">876</a> ● ( )<br>R: <a href="#">851</a> ●                        | 0341<br>I: <a href="#">286</a> ● ( )<br>R: <a href="#">286</a> ● | 0479<br>I: <a href="#">455</a> ● ( )<br>R: <a href="#">424</a> ● | 0802<br>I: <a href="#">927</a> ● ( )<br>R: <a href="#">907</a> ● | 0547<br>I: <a href="#">523</a> ● ( )<br>R: <a href="#">492</a> ● | 0662<br>I: <a href="#">788</a> ● ( <a href="#">1273</a> ● )<br>R: <a href="#">763</a> ● | 0345<br>I: <a href="#">612</a> ● ( )<br>R: <a href="#">618</a> ● | 0298<br>I: <a href="#">606</a> ● ( )<br>R: <a href="#">644</a> ● |
| HMFTB<br>HOM<br>FeedThru | 0751<br>I: <a href="#">877</a> ● ( )<br>R: <a href="#">852</a> ●                        | 0749<br>I: <a href="#">875</a> ● ( )<br>R: <a href="#">850</a> ● | 0496<br>I: <a href="#">472</a> ● ( )<br>R: <a href="#">441</a> ● | 0803<br>I: <a href="#">928</a> ● ( )<br>R: <a href="#">908</a> ● | 0614<br>I: <a href="#">557</a> ● ( )<br>R: <a href="#">559</a> ● | 0647<br>I: <a href="#">773</a> ● ( <a href="#">1259</a> ● )<br>R: <a href="#">748</a> ● | 0535<br>I: <a href="#">511</a> ● ( )<br>R: <a href="#">480</a> ● | 0305<br>I: <a href="#">608</a> ● ( )<br>R: <a href="#">646</a> ● |
| FPFT<br>Field<br>Probe   | 0328<br>I: <a href="#">340</a> ● ( <a href="#">1323</a> ● )<br>R: <a href="#">313</a> ● | 0391<br>I: <a href="#">415</a> ●<br>R: <a href="#">383</a> ●     | 0184<br>I: <a href="#">162</a> ●<br>R: <a href="#">162</a> ●     | 0383<br>I: <a href="#">407</a> ●<br>R: <a href="#">375</a> ●     | 0056<br>I: <a href="#">34</a> ●<br>R: <a href="#">34</a> ●       | 0299<br>I: <a href="#">278</a> ●<br>R: <a href="#">277</a> ●                            | I:<br>R:                                                         | 0236<br>I: <a href="#">214</a> ●<br>R: <a href="#">214</a> ●     |
| NTFT<br>Input<br>Coupler | 0090                                                                                    | 0034                                                             | 0100                                                             | 0078                                                             | 0124                                                             | 0064                                                                                    | 0089                                                             | 0131                                                             |
| HELV                     | HT072                                                                                   | HT140                                                            | HT096                                                            | HT056                                                            | HT149                                                            | HT203                                                                                   | HT079                                                            | HT094                                                            |
| PICKUP                   |                                                                                         |                                                                  |                                                                  |                                                                  |                                                                  |                                                                                         |                                                                  |                                                                  |
| VALVE                    |                                                                                         |                                                                  |                                                                  |                                                                  |                                                                  |                                                                                         |                                                                  |                                                                  |
| AV15<br>VALVE            | 0061                                                                                    | 0004                                                             | 0564                                                             | 0014                                                             | 0564                                                             | 0008                                                                                    | 0116                                                             | 0104                                                             |
| ANTENNA                  |                                                                                         |                                                                  |                                                                  |                                                                  |                                                                  |                                                                                         |                                                                  |                                                                  |
| FLANGE<br>SHORT          | F1004793-A-053                                                                          | 003P                                                             | 353                                                              | F1004793-A-017                                                   | 354                                                              | F1004793-A-065                                                                          | JL0019317-003p                                                   | 074                                                              |
| FLANGE<br>LONG           | F00457202-D-048                                                                         | PCM-003                                                          | 346                                                              | F00457202-D-047                                                  | 337                                                              | F00457202-D-021                                                                         | F00457202-D-017                                                  | 101                                                              |
| PBD<br>BURST<br>DISK     |                                                                                         | 135                                                              |                                                                  | 094                                                              |                                                                  | 007P                                                                                    | 003P                                                             | 0004                                                             |
| HOM1<br>coupler<br>side  |                                                                                         |                                                                  |                                                                  |                                                                  |                                                                  |                                                                                         |                                                                  |                                                                  |

|                    |  |  |  |  |  |  |  |  |
|--------------------|--|--|--|--|--|--|--|--|
| HOM2<br>tuner side |  |  |  |  |  |  |  |  |
|--------------------|--|--|--|--|--|--|--|--|

| CMSN    | CLOSED | OPEN | % CLOSED | % OPEN |
|---------|--------|------|----------|--------|
| J1.3-20 |        |      |          |        |
| TRAVs   | 277    | 4    | 98.58%   | 1.42%  |
| NCRs    | 47     | 0    | 100.00%  | 0.00%  |
| D3S     | 1      | 0    | 100.00%  | 0.00%  |