

Test Logs

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Applicant: Shanghai Smawave Technology Co., Ltd

Address: 3/F, Building 8, 1001 North Qinzhou Road · Xuhui District, Shanghai, China

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

Lin Kou Laboratories

Lab Address: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

Test Location: No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City

33383, Taiwan

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3.1 3.2 4 4.1 5 5.1 6 6.1 6.2	WINNF.FT.C.MES.3 WINNF.FT.C.MES.4 CBSD Relinquishment Process WINNF.FT.C.RLQ.1 CBSD Deregistration Process WINNF.FT.C.DRG.1 CBSD Security Validation WINNF.FT.C.SCS.1 WINNF.FT.C.SCS.2	40 49 49 52 55 55
3.1 3.2 4 4.1 5 5.1 6 6.1 6.2 6.3	WINNF.FT.C.MES.3 WINNF.FT.C.MES.4 CBSD Relinquishment Process WINNF.FT.C.RLQ.1 CBSD Deregistration Process WINNF.FT.C.DRG.1 CBSD Security Validation WINNF.FT.C.SCS.1 WINNF.FT.C.SCS.2 WINNF.FT.C.SCS.3	40 49 49 52 55 55 56
3.1 3.2 4 4.1 5 5.1 6 6.1 6.2	WINNF.FT.C.MES.3 WINNF.FT.C.MES.4 CBSD Relinquishment Process WINNF.FT.C.RLQ.1 CBSD Deregistration Process WINNF.FT.C.DRG.1 CBSD Security Validation WINNF.FT.C.SCS.1 WINNF.FT.C.SCS.2	40 49 49 52 55 55 56 56
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3.1 3.2 4 4.1 5 5.1 6 6.1 6.2 6.3 6.4 6.5	WINNF.FT.C.MES.3 WINNF.FT.C.MES.4 CBSD Relinquishment Process WINNF.FT.C.RLQ.1 CBSD Deregistration Process WINNF.FT.C.DRG.1 CBSD Security Validation WINNF.FT.C.SCS.1 WINNF.FT.C.SCS.2 WINNF.FT.C.SCS.3 WINNF.FT.C.SCS.4 WINNF.FT.C.SCS.5	40 44 49 52 55 56 56 56 56



1 CBSD Registration Process

}

1

```
1.1
     WINNF.FT.C.REG.1
2020-05-07T07:19:24.618Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2020-05-07T07:19:24.618Z - INFO - the selected test from the user : WINNF.FT.C.REG.1 is starting now
2020-05-07T07:19:52.253Z - INFO - registration request from CBRS : {
    "registrationRequest": [
            "cbsdSerialNumber": "0001601",
            "fccld": "001415",
            "userId": "7zY6fG"
        }
    ]
2020-05-07T07:19:52.253Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
            "cbsdld": "001415Mock-SAS0001601",
            "response": {
                 "responseCode": 0
```

2020-05-07T07:19:54.003Z - INFO - arrived to nstep starting question answer session with the technician 2020-05-07T07:19:54.003Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2020-05-07T07:20:00.832Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n

2020-05-07T07:20:01.221Z - INFO - The final result of the test: WINNF.FT.C.REG.1 is - passed

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1.2 WINNF.FT.C.REG.8

2020-05-07T07:23:21.788Z - INFO - arrived to nstep starting question answer session with the technician 2020-05-07T07:23:21.788Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2020-05-07T07:24:16.318Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n

2020-05-07T07:24:16.911Z - INFO - The final result of the test : WINNF.FT.C.REG.8 is - passed



1.3 WINNF.FT.C.REG.10

2020-05-07T07:35:40.959Z - INFO - arrived to nstep starting question answer session with the technician 2020-05-07T07:35:40.959Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2020-05-07T07:35:55.255Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n

2020-05-07T07:35:56.207Z - INFO - The final result of the test : WINNF.FT.C.REG.10 is - passed



1.4 WINNF.FT.C.REG.12

2020-05-07T07:38:15.969Z - INFO - arrived to nstep starting question answer session with the technician 2020-05-07T07:38:15.969Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2020-05-07T07:39:24.138Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n

2020-05-07T07:39:24.592Z - INFO - The final result of the test : WINNF.FT.C.REG.12 is - passed



1.5 WINNF.FT.C.REG.14

2020-05-07T07:42:59.740Z - INFO - arrived to nstep starting question answer session with the technician 2020-05-07T07:42:59.740Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2020-05-07T07:43:48.364Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n

2020-05-07T07:43:48.832Z - INFO - The final result of the test : WINNF.FT.C.REG.14 is - passed



1.6 WINNF.FT.C.REG.16

2020-05-07T07:46:28.638Z - INFO - arrived to nstep starting question answer session with the technician 2020-05-07T07:46:28.638Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2020-05-07T07:47:32.559Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n

2020-05-07T07:47:33.184Z - INFO - The final result of the test: WINNF.FT.C.REG.16 is - passed



1.7 WINNF.FT.C.REG.18

2020-05-07T07:55:45.384Z - INFO - arrived to nstep starting question answer session with the technician 2020-05-07T07:55:45.384Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2020-05-07T07:57:52.395Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n

2020-05-07T07:57:52.756Z - INFO - The final result of the test: WINNF.FT.C.REG.18 is - passed



CBSD SPECTRUM GRANT PROCESS

```
WINNF.FT.C.GRA.1
1.8
2020-05-07T08:50:18.628Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2020-05-07T08:50:18.628Z - INFO - the selected test from the user: WINNF.FT.C.GRA.1 is starting now
2020-05-07T08:51:25.926Z - INFO - registration request from CBRS : {
    "registrationRequest": [
            "cbsdSerialNumber": "0001601",
            "fccld": "001415".
            "userId": "7zY6fG"
    1
2020-05-07T08:51:25.940Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
             "cbsdld": "001415Mock-SAS0001601",
            "response": {
                 "responseCode": 0
        }
    1
2020-05-07T08:51:30.160Z - INFO - grant request from CBRS : {
    "grantRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "operationParam": {
                 "maxEirp": 27,
                 "operationFrequencyRange": {
                     "highFrequency": 3635000000,
                     "lowFrequency": 3615000000
            }
        }
2020-05-07T08:51:30.176Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
             "cbsdld": "001415Mock-SAS0001601",
            "response": {
                 "responseCode": 400
        }
    ]
2020-05-07T08:51:31.707Z - INFO - arrived to nstep starting question answer session with the technician
2020-05-07T08:51:31.707Z - INFO - the question is: Were there RF transmissions from the CBSD1 during
the test? please choose one of the answers:
2020-05-07T08:52:16.256Z - INFO - for the question: Were there RF transmissions from the CBSD1 during
the test?, the user choose n
2020-05-07T08:52:17.147Z - INFO - The final result of the test: WINNF.FT.C.GRA.1 is - passed
```

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```
WINNF.FT.C.GRA.2
2020-05-08T01:53:26.473Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2020-05-08T01:53:26.473Z - INFO - the selected test from the user : WINNF.FT.C.GRA.2 is starting now
2020-05-08T01:53:55.255Z - INFO - registration request from CBRS : {
    "registrationRequest": [
            "cbsdSerialNumber": "0001601",
            "fccld": "001415".
            "userId": "7zY6fG"
    1
2020-05-08T01:53:55.269Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
            "cbsdld": "001415Mock-SAS0001601",
            "response": {
                 "responseCode": 0
        }
    1
2020-05-08T01:53:59.489Z - INFO - grant request from CBRS : {
    "grantRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "operationParam": {
                 "maxEirp": 27,
                 "operationFrequencyRange": {
                     "highFrequency": 3635000000,
                     "lowFrequency": 3615000000
            }
        }
2020-05-08T01:53:59.505Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
             "cbsdld": "001415Mock-SAS0001601",
            "response": {
                 "responseCode": 401
        }
    ]
2020-05-08T01:54:00.957Z - INFO - arrived to nstep starting question answer session with the technician
2020-05-08T01:54:00.957Z - INFO - the question is: Were there RF transmissions from the CBSD1 during
the test? please choose one of the answers:
2020-05-08T01:54:05.630Z - INFO - for the question: Were there RF transmissions from the CBSD1 during
the test?, the user choose n
2020-05-08T01:54:06.255Z - INFO - The final result of the test: WINNF.FT.C.GRA.2 is - passed
```

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2 CBSD Heart Beat Process

WINNF.FT.C.HBT.1 2020-05-08T02:24:59.839Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13 2020-05-08T02:24:59.839Z - INFO - the selected test from the user: WINNF.FT.C.HBT.1 is starting now 2020-05-08T02:25:29.684Z - INFO - registration request from CBRS : { "registrationRequest": [{ "cbsdSerialNumber": "0001601", "fccld": "001415", "userId": "7zY6fG" } 2020-05-08T02:25:29.700Z - INFO - engine sent successfully, the response to CBRS : { "registrationResponse": ["cbsdld": "001415Mock-SAS0001601", "response": { "responseCode": 0 } 1 2020-05-08T02:25:33.904Z - INFO - grant request from CBRS : { "grantRequest": ["cbsdld": "001415Mock-SAS0001601", "operationParam": { "maxEirp": 27, "operationFrequencyRange": { "highFrequency": 3635000000, "lowFrequency": 3615000000 } } 1 2020-05-08T02:25:33.904Z - INFO - engine sent successfully, the response to CBRS : { "grantResponse": ["cbsdld": "001415Mock-SAS0001601", "channelType": "GAA", "grantExpireTime": "2020-05-15T02:25:33Z", "grantId": "623789291", "heartbeatInterval": 60, "response": { "responseCode": 0 } 1 2020-05-08T02:26:04.138Z - INFO - heartbeat request from CBRS : { "heartbeatRequest": ["cbsdId": "001415Mock-SAS0001601", "grantId": "623789291",

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```
"operationState": "GRANTED"
        }
    1
2020-05-08T02:26:04.138Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "623789291",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T02:29:24Z"
        }
    1
2020-05-08T02:26:34.341Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "623789291",
             "operationState": "AUTHORIZED"
    1
2020-05-08T02:26:34.341Z - INFO - Time interval between two heartbeat request messages is: 30.202, limit
2020-05-08T02:26:34.341Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "623789291",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T02:29:54Z"
        }
    1
2020-05-08T02:27:04.572Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "623789291",
             "operationState": "AUTHORIZED"
2020-05-08T02:27:04.572Z - INFO - Time interval between two heartbeat request messages is: 30.231, limit
is: 65.0
2020-05-08T02:27:04.588Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "623789291",
             "response": {
                 "responseCode": 0
```



```
"transmitExpireTime": "2020-05-08T02:30:24Z"
        }
    1
2020-05-08T02:27:34.773Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "623789291",
             "operationState": "AUTHORIZED"
2020-05-08T02:27:34.773Z - INFO - Time interval between two heartbeat request messages is: 30.202, limit
is: 65.0
2020-05-08T02:27:34.773Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "623789291",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T02:30:54Z"
        }
    1
2020-05-08T02:28:05.009Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "623789291",
             "operationState": "AUTHORIZED"
    1
2020-05-08T02:28:05.023Z - INFO - Time interval between two heartbeat request messages is: 30.235, limit
2020-05-08T02:28:05.023Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "623789291",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T02:31:25Z"
        }
2020-05-08T02:28:35.269Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "623789291",
             "operationState": "AUTHORIZED"
        }
    ]
```

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```
2020-05-08T02:28:35.269Z - INFO - Time interval between two heartbeat request messages is: 30.261, limit
is: 65.0
2020-05-08T02:28:35.269Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "623789291",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T02:31:55Z"
        }
    ]
2020-05-08T02:28:36.759Z - INFO - arrived to nstep starting question answer session with the technician
2020-05-08T02:28:36.759Z - INFO - the question is: Did CBSD1 transmit power prior to AUTHORIZED state
(first successful HBT response)? please choose one of the answers :
2020-05-08T02:30:52.109Z - INFO - for the question : Did CBSD1 transmit power prior to AUTHORIZED state
(first successful HBT response)?, the user choose n
2020-05-08T02:30:52.109Z - INFO - the question is : Did CBSD1 transmit only within the frequency range
specified in its grantRequest message? please choose one of the answers :
2020-05-08T02:30:53.546Z - INFO - for the question: Did CBSD1 transmit only within the frequency range
specified in its grantReguest message? , the user choose y
2020-05-08T02:30:54.046Z - INFO - The final result of the test: WINNF.FT.C.HBT.1 is - passed
```

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2.2 WINNF.FT.C.HBT.3

```
2020-05-08T02:35:27.513Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
挥乳 岐蠴邑05-08T02:35:27.513Z - INFO - the selected test from the user : WINNF.FT.C.HBT.3 is starting now
2020-05-08T02:36:15.108Z - INFO - registration request from CBRS : {
    "registrationRequest": [
             "cbsdSerialNumber": "0001601",
            "fccld": "001415",
            "userId": "7zY6fG"
        }
    ]
2020-05-08T02:36:15.125Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
            "cbsdld": "001415Mock-SAS0001601",
            "response": {
                 "responseCode": 0
        }
2020-05-08T02:36:19.328Z - INFO - grant request from CBRS : {
    "grantRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "operationParam": {
                 "maxEirp": 27,
                 "operationFrequencyRange": {
                     "highFrequency": 3635000000,
                     "lowFrequency": 3615000000
            }
        }
    1
2020-05-08T02:36:19.328Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
             "cbsdld": "001415Mock-SAS0001601",
            "channelType": "GAA",
             "grantExpireTime": "2020-05-15T02:36:19Z",
             "grantId": "803781172",
            "heartbeatInterval": 60,
            "response": {
                 "responseCode": 0
            }
        }
2020-05-08T02:36:49.563Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
            "grantId": "803781172",
             "operationState": "GRANTED"
        }
    ]
```

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```
2020-05-08T02:36:49.563Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "803781172",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T02:40:09Z"
        }
    ]
2020-05-08T02:37:19.759Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "803781172",
             "operationState": "AUTHORIZED"
    ]
2020-05-08T02:37:19.775Z - INFO - Time interval between two heartbeat request messages is: 30.196, limit
is: 65.0
2020-05-08T02:37:19.775Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "803781172",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T02:40:39Z"
        }
    1
2020-05-08T02:37:49.963Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "803781172",
             "operationState": "AUTHORIZED"
    1
2020-05-08T02:37:49.963Z - INFO - Time interval between two heartbeat request messages is: 30.204, limit
2020-05-08T02:37:49.979Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "803781172",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T02:41:09Z"
        }
    ]
```

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```
2020-05-08T02:38:20.259Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "803781172",
             "operationState": "AUTHORIZED"
        }
    ]
2020-05-08T02:38:20.259Z - INFO - Time interval between two heartbeat request messages is: 30.296, limit
2020-05-08T02:38:20.259Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "803781172",
             "response": {
                 "responseCode": 105
             "transmitExpireTime": "2020-05-08T02:38:20Z"
        }
    ]
}
2020-05-08T02:38:22.213Z - INFO - arrived to nstep starting question answer session with the technician
2020-05-08T02:38:22.305Z - INFO - the question is : Did the CBSD stop RF transmission within 60 seconds
of receiving Heartbeat response with responseCode = 105? please choose one of the answers :
2020-05-08T02:42:04.753Z - INFO - for the question : Did the CBSD stop RF transmission within 60 seconds
of receiving Heartbeat response with responseCode = 105?, the user choose y
2020-05-08T02:42:05.142Z - INFO - The final result of the test: WINNF.FT.C.HBT.3 is - passed
```

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WINNF.FT.C.HBT.4 2.3 2020-05-08T05:07:13.322Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13 2020-05-08T05:07:13.322Z - INFO - the selected test from the user: WINNF.FT.C.HBT.4 is starting now 2020-05-08T05:07:51.418Z - INFO - registration request from CBRS : { "registrationRequest": ["cbsdSerialNumber": "0001601", "fccld": "001415", "userId": "7zY6fG" }] 2020-05-08T05:07:51.434Z - INFO - engine sent successfully, the response to CBRS : { "registrationResponse": ["cbsdld": "001415Mock-SAS0001601", "response": { "responseCode": 0 } 2020-05-08T05:07:55.651Z - INFO - grant request from CBRS : { "grantRequest": ["cbsdld": "001415Mock-SAS0001601", "operationParam": { "maxEirp": 27, "operationFrequencyRange": { "highFrequency": 3635000000, "lowFrequency": 3615000000 } } 1 2020-05-08T05:07:55.667Z - INFO - engine sent successfully, the response to CBRS : { "grantResponse": ["cbsdld": "001415Mock-SAS0001601", "channelType": "GAA", "grantExpireTime": "2020-05-15T05:07:55Z", "grantId": "70887620", "heartbeatInterval": 60, "response": { "responseCode": 0 } } 2020-05-08T05:08:25.852Z - INFO - heartbeat request from CBRS : { "heartbeatRequest": ["cbsdld": "001415Mock-SAS0001601", "grantId": "70887620", "operationState": "GRANTED" }]



```
2020-05-08T05:08:25.852Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "70887620",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:11:45Z"
        }
    ]
2020-05-08T05:08:56.058Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "70887620",
             "operationState": "AUTHORIZED"
    ]
2020-05-08T05:08:56.058Z - INFO - Time interval between two heartbeat request messages is: 30.205, limit
is: 65.0
2020-05-08T05:08:56.058Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "70887620",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:12:16Z"
        }
    1
2020-05-08T05:09:26.260Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "70887620",
             "operationState": "AUTHORIZED"
    1
2020-05-08T05:09:26.260Z - INFO - Time interval between two heartbeat request messages is: 30.203, limit
2020-05-08T05:09:26.260Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "70887620",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:12:46Z"
        }
    ]
```

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```
2020-05-08T05:09:56.493Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "70887620",
             "operationState": "AUTHORIZED"
    ]
2020-05-08T05:09:56.493Z - INFO - Time interval between two heartbeat request messages is: 30.233, limit
2020-05-08T05:09:56.493Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "70887620",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:13:16Z"
        }
    ]
2020-05-08T05:10:26.697Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "70887620",
             "operationState": "AUTHORIZED"
    ]
2020-05-08T05:10:26.697Z - INFO - Time interval between two heartbeat request messages is: 30.203, limit
is: 65.0
2020-05-08T05:10:26.713Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "70887620",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:13:46Z"
        }
    1
2020-05-08T05:10:56.934Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "70887620",
             "operationState": "AUTHORIZED"
2020-05-08T05:10:56.934Z - INFO - Time interval between two heartbeat request messages is: 30.237, limit
is: 65.0
```



```
2020-05-08T05:10:56.934Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "70887620",
             "response": {
                 "responseCode": 500
             "transmitExpireTime": "2020-05-08T05:10:56Z"
        }
    ]
2020-05-08T05:10:58.121Z - INFO - arrived to nstep starting question answer session with the technician
2020-05-08T05:10:58.121Z - INFO - the question is: Did the CBSD1 stop RF transmission within 60 seconds
of receiving Heartbeat response with responseCode = 500? please choose one of the answers :
2020-05-08T05:14:34.733Z - INFO - for the question : Did the CBSD1 stop RF transmission within 60
seconds of receiving Heartbeat response with responseCode = 500?, the user choose y
2020-05-08T05:14:35.170Z - INFO - The final result of the test: WINNF.FT.C.HBT.4 is - passed
```

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WINNF.FT.C.HBT.5 2.4 2020-05-08T03:09:45.759Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13 2020-05-08T03:09:45.759Z - INFO - the selected test from the user: WINNF.FT.C.HBT.5 is starting now 2020-05-08T03:13:24.397Z - INFO - registration request from CBRS : { "registrationRequest": ["cbsdSerialNumber": "0001601", "fccld": "001415", "userId": "7zY6fG" }] 2020-05-08T03:13:24.413Z - INFO - engine sent successfully, the response to CBRS : { "registrationResponse": ["cbsdld": "001415Mock-SAS0001601", "response": { "responseCode": 0 } 2020-05-08T03:13:28.647Z - INFO - grant request from CBRS : { "grantRequest": ["cbsdld": "001415Mock-SAS0001601", "operationParam": { "maxEirp": 27, "operationFrequencyRange": { "highFrequency": 3635000000, "lowFrequency": 3615000000 } } 1 2020-05-08T03:13:28.663Z - INFO - engine sent successfully, the response to CBRS : { "grantResponse": ["cbsdld": "001415Mock-SAS0001601", "channelType": "GAA", "grantExpireTime": "2020-05-15T03:13:28Z", "grantId": "334659614", "heartbeatInterval": 60, "response": { "responseCode": 0 } } 2020-05-08T03:13:58.898Z - INFO - heartbeat request from CBRS : { "heartbeatRequest": ["cbsdld": "001415Mock-SAS0001601", "grantId": "334659614", "operationState": "GRANTED" }]



```
2020-05-08T03:13:58.898Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "334659614",
             "response": {
                 "responseCode": 501
             "transmitExpireTime": "2020-05-08T03:13:58Z"
        }
    ]
2020-05-08T03:14:29.210Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "334659614",
             "operationState": "GRANTED"
    ]
2020-05-08T03:14:29.210Z - INFO - Time interval between two heartbeat request messages is: 30.313, limit
is: 65.0
2020-05-08T03:14:29.210Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "334659614",
             "response": {
                 "responseCode": 501
             "transmitExpireTime": "2020-05-08T03:14:29Z"
        }
    1
2020-05-08T03:14:30.492Z - INFO - arrived to nstep starting question answer session with the technician
2020-05-08T03:14:30.492Z - INFO - the question is: Did the CBSD transmit at any time during the test?
please choose one of the answers:
2020-05-08T03:14:45.617Z - INFO - for the question: Did the CBSD transmit at any time during the test?, the
user choose n
2020-05-08T03:14:45.976Z - INFO - The final result of the test: WINNF.FT.C.HBT.5 is - passed
```

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WINNF.FT.C.HBT.6 2.5 2020-05-08T03:16:12.164Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13 2020-05-08T03:16:12.164Z - INFO - the selected test from the user: WINNF.FT.C.HBT.6 is starting now 2020-05-08T03:16:41.647Z - INFO - registration request from CBRS : { "registrationRequest": ["cbsdSerialNumber": "0001601", "fccld": "001415", "userId": "7zY6fG" }] 2020-05-08T03:16:41.677Z - INFO - engine sent successfully, the response to CBRS : { "registrationResponse": ["cbsdld": "001415Mock-SAS0001601", "response": { "responseCode": 0 } 2020-05-08T03:16:45.881Z - INFO - grant request from CBRS : { "grantRequest": ["cbsdld": "001415Mock-SAS0001601", "operationParam": { "maxEirp": 27, "operationFrequencyRange": { "highFrequency": 3635000000, "lowFrequency": 3615000000 } } 1 2020-05-08T03:16:45.897Z - INFO - engine sent successfully, the response to CBRS : { "grantResponse": ["cbsdld": "001415Mock-SAS0001601", "channelType": "GAA", "grantExpireTime": "2020-05-15T03:16:45Z", "grantId": "352752300", "heartbeatInterval": 60, "response": { "responseCode": 0 } } 2020-05-08T03:17:16.210Z - INFO - heartbeat request from CBRS : { "heartbeatRequest": ["cbsdld": "001415Mock-SAS0001601", "grantId": "352752300", "operationState": "GRANTED" }]



```
2020-05-08T03:17:16.210Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "352752300",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T03:20:36Z"
        }
    ]
2020-05-08T03:17:46.446Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "352752300",
             "operationState": "AUTHORIZED"
    ]
2020-05-08T03:17:46.446Z - INFO - Time interval between two heartbeat request messages is: 30.235, limit
is: 65.0
2020-05-08T03:17:46.446Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "352752300",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T03:21:06Z"
        }
    1
2020-05-08T03:18:16.638Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "352752300",
             "operationState": "AUTHORIZED"
    1
2020-05-08T03:18:16.654Z - INFO - Time interval between two heartbeat request messages is: 30.193, limit
2020-05-08T03:18:16.654Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "352752300",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T03:21:36Z"
        }
    ]
```



```
2020-05-08T03:18:46.891Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "352752300",
             "operationState": "AUTHORIZED"
        }
    1
2020-05-08T03:18:46.891Z - INFO - Time interval between two heartbeat request messages is: 30.252, limit
2020-05-08T03:18:46.891Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "352752300",
             "response": {
                 "responseCode": 501
             "transmitExpireTime": "2020-05-08T03:18:46Z"
        }
    1
2020-05-08T03:19:17.204Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "352752300",
             "operationState": "GRANTED"
    1
2020-05-08T03:19:17.204Z - INFO - Time interval between two heartbeat request messages is: 30.314, limit
is: 65.0
2020-05-08T03:19:17.204Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "352752300",
             "response": {
                 "responseCode": 501
             "transmitExpireTime": "2020-05-08T03:19:17Z"
        }
    1
2020-05-08T03:19:18.470Z - INFO - arrived to nstep starting question answer session with the technician
2020-05-08T03:19:18.470Z - INFO - the question is : Did the CBSD stop RF transmission within 60 seconds
of receiving Heartbeat response with responseCode = 501? please choose one of the answers :
2020-05-08T03:19:58.819Z - INFO - for the question : Did the CBSD stop RF transmission within 60 seconds
of receiving Heartbeat response with responseCode = 501?, the user choose y
2020-05-08T03:19:59.121Z - INFO - The final result of the test: WINNF.FT.C.HBT.6 is - passed
```

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```
WINNF.FT.C.HBT.7
2.6
2020-05-08T03:31:54.865Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2020-05-08T03:31:54.865Z - INFO - the selected test from the user: WINNF.FT.C.HBT.7 is starting now
2020-05-08T03:32:19.913Z - INFO - registration request from CBRS : {
    "registrationRequest": [
             "cbsdSerialNumber": "0001601",
            "fccld": "001415",
            "userId": "7zY6fG"
        }
    ]
2020-05-08T03:32:19.944Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
            "cbsdld": "001415Mock-SAS0001601",
            "response": {
                 "responseCode": 0
        }
2020-05-08T03:32:24.147Z - INFO - grant request from CBRS : {
    "grantRequest": [
             "cbsdld": "001415Mock-SAS0001601",
            "operationParam": {
                 "maxEirp": 27,
                 "operationFrequencyRange": {
                     "highFrequency": 3635000000,
                     "lowFrequency": 3615000000
            }
        }
    1
2020-05-08T03:32:24.163Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
             "cbsdld": "001415Mock-SAS0001601",
            "channelType": "GAA",
             "grantExpireTime": "2020-05-15T03:32:24Z",
             "grantId": "153765683",
            "heartbeatInterval": 60,
            "response": {
                 "responseCode": 0
            }
        }
2020-05-08T03:32:54.351Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
            "grantId": "153765683",
             "operationState": "GRANTED"
        }
    ]
```



```
2020-05-08T03:32:54.351Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "153765683",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T03:36:14Z"
        }
    ]
2020-05-08T03:33:24.542Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "153765683",
             "operationState": "AUTHORIZED"
    ]
2020-05-08T03:33:24.558Z - INFO - Time interval between two heartbeat request messages is: 30.207, limit
is: 65.0
2020-05-08T03:33:24.558Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "153765683",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T03:36:44Z"
        }
    1
2020-05-08T03:33:54.746Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "153765683",
             "operationState": "AUTHORIZED"
    1
2020-05-08T03:33:54.746Z - INFO - Time interval between two heartbeat request messages is: 30.188, limit
2020-05-08T03:33:54.760Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "153765683",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T03:37:14Z"
        }
    ]
```



```
2020-05-08T03:34:24.996Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "153765683",
             "operationState": "AUTHORIZED"
        }
    1
2020-05-08T03:34:24.996Z - INFO - Time interval between two heartbeat request messages is: 30.25, limit is:
2020-05-08T03:34:24.996Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "153765683",
             "response": {
                 "responseCode": 502
             "transmitExpireTime": "2020-05-08T03:34:24Z"
        }
    ]
2020-05-08T03:34:25.355Z - INFO - relinquishment request from CBRS : {
    "relinquishmentRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "153765683"
    ]
2020-05-08T03:34:25.355Z - INFO - engine sent successfully, the response to CBRS : {
    "relinquishmentResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "153765683",
             "response": {
                 "responseCode": 0
        }
    ]
2020-05-08T03:34:26.964Z - INFO - arrived to nstep starting question answer session with the technician
2020-05-08T03:34:26.964Z - INFO - the question is : Did the CBSD stop RF transmission within 60 seconds
of receiving Heartbeat response with responseCode = 502? please choose one of the answers:
2020-05-08T03:35:49.338Z - INFO - for the question : Did the CBSD stop RF transmission within 60 seconds
of receiving Heartbeat response with responseCode = 502?, the user choose y
2020-05-08T03:35:49.713Z - INFO - The final result of the test: WINNF.FT.C.HBT.7 is - passed
```

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WINNF.FT.C.HBT.9 2020-05-08T03:51:15.678Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13 2020-05-08T03:51:15.678Z - INFO - the selected test from the user: WINNF.FT.C.HBT.9 is starting now 2020-05-08T03:51:39.171Z - INFO - registration request from CBRS : { "registrationRequest": ["cbsdSerialNumber": "0001601", "fccld": "001415". "userId": "7zY6fG" 1 2020-05-08T03:51:39.187Z - INFO - engine sent successfully, the response to CBRS : { "registrationResponse": ["cbsdld": "001415Mock-SAS0001601", "response": { "responseCode": 0 } 1 2020-05-08T03:51:43.423Z - INFO - grant request from CBRS : { "grantRequest": ["cbsdld": "001415Mock-SAS0001601", "operationParam": { "maxEirp": 27, "operationFrequencyRange": { "highFrequency": 3635000000, "lowFrequency": 3615000000 } } 2020-05-08T03:51:43.423Z - INFO - engine sent successfully, the response to CBRS : { "grantResponse": ["cbsdld": "001415Mock-SAS0001601", "channelType": "GAA", "grantExpireTime": "2020-05-15T03:51:43Z", "grantId": "844437424", "heartbeatInterval": 60. "response": { "responseCode": 0 }] 2020-05-08T03:52:13.611Z - INFO - heartbeat request from CBRS : { "heartbeatRequest": ["cbsdld": "001415Mock-SAS0001601", "grantId": "844437424",



```
"operationState": "GRANTED"
        }
    1
2020-05-08T03:52:34.019Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
             "cbsdld": "001415Mock-SAS0001601",
            "grantId": "844437424",
             "operationState": "GRANTED"
    ]
2020-05-08T03:52:34.019Z - INFO - request message received while HBT is absent, sleep 184 sec before
responding
2020-05-08T03:52:54.219Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
            "cbsdld": "001415Mock-SAS0001601",
             "grantId": "844437424",
             "operationState": "GRANTED"
        }
    ]
}
2020-05-08T03:52:54.219Z - INFO - request message received while HBT is absent, sleep 164 sec before
responding
2020-05-08T03:53:14.443Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdld": "001415Mock-SAS0001601",
            "grantId": "844437424",
            "operationState": "GRANTED"
2020-05-08T03:53:14.443Z - INFO - request message received while HBT is absent, sleep 144 sec before
responding
2020-05-08T03:53:34.568Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "844437424",
             "operationState": "GRANTED"
        }
    1
2020-05-08T03:53:34.568Z - INFO - request message received while HBT is absent, sleep 124 sec before
responding
2020-05-08T03:53:54.802Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdId": "001415Mock-SAS0001601",
            "grantId": "844437424",
             "operationState": "GRANTED"
        }
    ]
2020-05-08T03:53:54.802Z - INFO - request message received while HBT is absent, sleep 103 sec before
```

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```
responding
2020-05-08T03:54:14.974Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
            "cbsdld": "001415Mock-SAS0001601",
             "grantId": "844437424",
             "operationState": "GRANTED"
        }
    1
2020-05-08T03:54:14.974Z - INFO - request message received while HBT is absent, sleep 83 sec before
responding
2020-05-08T03:54:35.128Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
            "cbsdld": "001415Mock-SAS0001601",
             "grantId": "844437424",
            "operationState": "GRANTED"
    ]
2020-05-08T03:54:35.128Z - INFO - request message received while HBT is absent, sleep 63 sec before
responding
2020-05-08T03:54:55.326Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
            "cbsdld": "001415Mock-SAS0001601",
             "grantId": "844437424",
            "operationState": "GRANTED"
    ]
2020-05-08T03:54:55.326Z - INFO - request message received while HBT is absent, sleep 43 sec before
2020-05-08T03:55:15.573Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
            "cbsdld": "001415Mock-SAS0001601",
            "grantId": "844437424",
             "operationState": "GRANTED"
    ]
2020-05-08T03:55:15.573Z - INFO - request message received while HBT is absent, sleep 23 sec before
responding
2020-05-08T03:55:33.637Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "844437424",
             "response": {
                 "responseCode": 501
             "transmitExpireTime": "2020-05-08T03:55:33Z"
        }
    1
2020-05-08T03:55:35.059Z - INFO - arrived to nstep starting question answer session with the technician
```

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2020-05-08T03:55:35.059Z - INFO - the question is : Were there RF transmissions from the CBSD during the test? please choose one of the answers :

2020-05-08T03:55:37.823Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"

2020-05-08T03:55:37.980Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"

2020-05-08T03:55:38.028Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"

2020-05-08T03:55:38.153Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"

2020-05-08T03:55:38.230Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"

2020-05-08T03:55:38.355Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"

2020-05-08T03:55:38.464Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"

2020-05-08T03:55:38.589Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"

2020-05-08T03:55:38.589Z - INFO - engine sent successfully, the response to CBRS : "list index out of range"

2020-05-08T03:55:41.559Z - INFO - for the question : Were there RF transmissions from the CBSD during the test? , the user choose n

2020-05-08T03:55:41.964Z - INFO - The final result of the test : WINNF.FT.C.HBT.9 is - passed

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WINNF.FT.C.HBT.10 2.8 2020-05-08T05:30:57.967Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13 2020-05-08T05:30:57.967Z - INFO - the selected test from the user : WINNF.FT.C.HBT.10 is starting now 2020-05-08T05:31:30.812Z - INFO - registration request from CBRS : { "registrationRequest": ["cbsdSerialNumber": "0001601", "fccld": "001415", "userId": "7zY6fG" }] 2020-05-08T05:31:30.828Z - INFO - engine sent successfully, the response to CBRS : { "registrationResponse": ["cbsdld": "001415Mock-SAS0001601", "response": { "responseCode": 0 } 2020-05-08T05:31:35.030Z - INFO - grant request from CBRS : { "grantRequest": ["cbsdld": "001415Mock-SAS0001601", "operationParam": { "maxEirp": 27, "operationFrequencyRange": { "highFrequency": 3635000000, "lowFrequency": 3615000000 } } 1 2020-05-08T05:31:35.046Z - INFO - engine sent successfully, the response to CBRS : { "grantResponse": ["cbsdld": "001415Mock-SAS0001601", "channelType": "GAA", "grantExpireTime": "2020-05-15T05:31:35Z", "grantId": "279932917", "heartbeatInterval": 60, "response": { "responseCode": 0 } } 2020-05-08T05:32:05.236Z - INFO - heartbeat request from CBRS : { "heartbeatRequest": ["cbsdld": "001415Mock-SAS0001601", "grantId": "279932917", "operationState": "GRANTED" }]



```
2020-05-08T05:32:05.236Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "279932917",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:35:25Z"
        }
    ]
2020-05-08T05:32:35.433Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "279932917",
             "operationState": "AUTHORIZED"
    ]
2020-05-08T05:32:35.433Z - INFO - Time interval between two heartbeat request messages is: 30.197, limit
is: 65.0
2020-05-08T05:32:35.433Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "279932917",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:35:55Z"
        }
    1
2020-05-08T05:33:05.631Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "279932917",
             "operationState": "AUTHORIZED"
    1
2020-05-08T05:33:05.631Z - INFO - Time interval between two heartbeat request messages is: 30.198, limit
2020-05-08T05:33:05.631Z - INFO - LAST HBT RESPONSE THAT SET TRANSMIT EXPIRE TIME WAS AT:
2020-05-08 05:32:35.433000
2020-05-08T05:33:25.865Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "279932917",
             "operationState": "AUTHORIZED"
    ]
}
```



```
2020-05-08T05:33:25.865Z - INFO - request message received while HBT is absent, sleep 184 sec before
responding
2020-05-08T05:33:45.944Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "279932917",
             "operationState": "AUTHORIZED"
    1
2020-05-08T05:33:45.944Z - INFO - request message received while HBT is absent, sleep 164 sec before
responding
2020-05-08T05:34:05.944Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
            "cbsdld": "001415Mock-SAS0001601",
             "grantId": "279932917",
             "operationState": "AUTHORIZED"
        }
    ]
2020-05-08T05:34:05.944Z - INFO - request message received while HBT is absent, sleep 144 sec before
responding
2020-05-08T05:34:25.986Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "279932917",
             "operationState": "AUTHORIZED"
        }
    ]
2020-05-08T05:34:25.986Z - INFO - request message received while HBT is absent, sleep 124 sec before
responding
2020-05-08T05:34:46.035Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
            "grantId": "279932917",
             "operationState": "AUTHORIZED"
        }
    ]
2020-05-08T05:34:46.035Z - INFO - request message received while HBT is absent, sleep 104 sec before
responding
2020-05-08T05:35:06.062Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
            "grantId": "279932917",
             "operationState": "AUTHORIZED"
        }
    ]
2020-05-08T05:35:06.062Z - INFO - request message received while HBT is absent, sleep 84 sec before
responding
2020-05-08T05:35:26.062Z - INFO - heartbeat request from CBRS : {
```



```
"heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "279932917",
             "operationState": "AUTHORIZED"
    ]
2020-05-08T05:35:26.062Z - INFO - request message received while HBT is absent, sleep 64 sec before
2020-05-08T05:35:46.141Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "279932917",
             "operationState": "AUTHORIZED"
    ]
2020-05-08T05:35:46.141Z - INFO - request message received while HBT is absent, sleep 44 sec before
2020-05-08T05:36:06.236Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "279932917",
             "operationState": "AUTHORIZED"
    ]
2020-05-08T05:36:06.236Z - INFO - request message received while HBT is absent, sleep 24 sec before
2020-05-08T05:36:25.642Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "279932917",
             "response": {
                 "responseCode": 501
             "transmitExpireTime": "2020-05-08T05:36:25Z"
        }
    ]
2020-05-08T05:36:27.002Z - INFO - arrived to nstep starting question answer session with the technician
2020-05-08T05:36:27.002Z - INFO - the question is : Did the CBSD stop RF transmissions within
(transmitExpireTime + 60seconds) of last valid heartbeat response? please choose one of the answers:
2020-05-08T05:36:29.891Z - INFO - engine sent successfully, the response to CBRS : "list index out of
range"
2020-05-08T05:36:29.970Z - INFO - engine sent successfully, the response to CBRS : "list index out of
range"
2020-05-08T05:36:29.970Z - INFO - engine sent successfully, the response to CBRS : "list index out of
2020-05-08T05:36:30.002Z - INFO - engine sent successfully, the response to CBRS : "list index out of
2020-05-08T05:36:30.049Z - INFO - engine sent successfully, the response to CBRS : "list index out of
range"
2020-05-08T05:36:30.079Z - INFO - engine sent successfully, the response to CBRS : "list index out of
```

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	VEHITAS
range" 2020-05-08T05:36:30.079Z - INFO - engine sent successfully, the response to CBRS range"	: "list index out of
2020-05-08T05:36:30.157Z - INFO - engine sent successfully, the response to CBRS range"	: "list index out of
2020-05-08T05:36:30.252Z - INFO - engine sent successfully, the response to CBRS range"	: "list index out of
2020-05-08T05:37:10.127Z - INFO - for the question : Did the CBSD stop RF transmissions within (transmitExpireTime + 60seconds) of last valid heartbeat response? , the user choose y 2020-05-08T05:37:10.456Z - INFO - The final result of the test : WINNF.FT.C.HBT.10 is - passed	

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3 CBSD Measurement Report

WINNF.FT.C.MES.3 3.1 2020-05-08T05:41:33.676Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13 2020-05-08T05:41:33.676Z - INFO - the selected test from the user : WINNF.FT.C.MES.3 is starting now 2020-05-08T05:41:49.065Z - INFO - registration request from CBRS : { "registrationRequest": ["cbsdSerialNumber": "0001601", "fccld": "001415", "userId": "7zY6fG" }] 2020-05-08T05:41:49.096Z - INFO - engine sent successfully, the response to CBRS : { "registrationResponse": ["cbsdld": "001415Mock-SAS0001601", "response": { "responseCode": 0 } 1 2020-05-08T05:41:53.299Z - INFO - grant request from CBRS : { "grantRequest": ["cbsdld": "001415Mock-SAS0001601", "operationParam": { "maxEirp": 27, "operationFrequencyRange": { "highFrequency": 3635000000, "lowFrequency": 3615000000 } } } 1 2020-05-08T05:41:53.315Z - INFO - Response message contains measReportConfig 2020-05-08T05:41:53.315Z - INFO - engine sent successfully, the response to CBRS : { "grantResponse": ["cbsdld": "001415Mock-SAS0001601", "channelType": "GAA", "grantExpireTime": "2020-05-15T05:41:53Z", "grantId": "80174714", "heartbeatInterval": 60, "measReportConfig": ["RECEIVED_POWER_WITH_GRANT" "response": { "responseCode": 0 } }

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```
]
2020-05-08T05:42:23.549Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "80174714",
             "measReport": {
                 "rcvdPowerMeasReports": [
                         "measBandwidth": 10000000,
                         "measFrequency": 3615000000,
                         "measRcvdPower": -60
                         "measBandwidth": 10000000,
                         "measFrequency": 3625000000,
                         "measRcvdPower": -60
                1
             "operationState": "GRANTED"
        }
    1
2020-05-08T05:42:23.549Z - INFO - measReport received in heartbeat message
2020-05-08T05:42:23.549Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
            "cbsdld": "001415Mock-SAS0001601",
             "grantId": "80174714",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:45:43Z"
        }
    1
2020-05-08T05:42:53.734Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
            "cbsdld": "001415Mock-SAS0001601",
             "grantId": "80174714",
            "operationState": "AUTHORIZED"
    1
2020-05-08T05:42:53.734Z - INFO - Time interval between two heartbeat request messages is: 30.185, limit
2020-05-08T05:42:53.750Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "80174714",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:46:13Z"
```



```
}
    ]
2020-05-08T05:43:23.934Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "80174714",
             "operationState": "AUTHORIZED"
        }
    ]
2020-05-08T05:43:23.934Z - INFO - Time interval between two heartbeat request messages is: 30.2, limit is:
2020-05-08T05:43:23.950Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "80174714",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:46:43Z"
        }
    1
2020-05-08T05:43:54.219Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "80174714",
             "operationState": "AUTHORIZED"
2020-05-08T05:43:54.219Z - INFO - Time interval between two heartbeat request messages is: 30.284, limit
is: 65.0
2020-05-08T05:43:54.219Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "80174714",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:47:14Z"
        }
    ]
2020-05-08T05:44:24.424Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "80174714",
             "operationState": "AUTHORIZED"
    ]
}
```



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WINNF.FT.C.MES.4 2020-05-08T05:45:06.002Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13 2020-05-08T05:45:06.002Z - INFO - the selected test from the user: WINNF.FT.C.MES.4 is starting now 2020-05-08T05:45:29.174Z - INFO - registration request from CBRS : { "registrationRequest": ["cbsdSerialNumber": "0001601", "fccld": "001415". "userId": "7zY6fG" 1 2020-05-08T05:45:29.206Z - INFO - engine sent successfully, the response to CBRS : { "registrationResponse": ["cbsdld": "001415Mock-SAS0001601", "response": { "responseCode": 0 } 1 2020-05-08T05:45:33.424Z - INFO - grant request from CBRS : { "grantRequest": ["cbsdld": "001415Mock-SAS0001601", "operationParam": { "maxEirp": 27, "operationFrequencyRange": { "highFrequency": 3635000000, "lowFrequency": 3615000000 } } 2020-05-08T05:45:33.424Z - INFO - engine sent successfully, the response to CBRS : { "grantResponse": ["cbsdld": "001415Mock-SAS0001601", "channelType": "GAA", "grantExpireTime": "2020-05-15T05:45:33Z", "grantId": "274583910", "heartbeatInterval": 60. "response": { "responseCode": 0 }] 2020-05-08T05:46:03.661Z - INFO - heartbeat request from CBRS : { "heartbeatRequest": ["cbsdld": "001415Mock-SAS0001601", "grantId": "274583910",



```
"operationState": "GRANTED"
        }
    1
2020-05-08T05:46:03.661Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdld": "001415Mock-SAS0001601",
            "grantId": "274583910",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:49:23Z"
        }
    1
2020-05-08T05:46:33.865Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "274583910",
            "operationState": "AUTHORIZED"
        }
    1
2020-05-08T05:46:33.865Z - INFO - Time interval between two heartbeat request messages is: 30.204, limit
2020-05-08T05:46:33.865Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
            "cbsdld": "001415Mock-SAS0001601",
            "grantId": "274583910",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:49:53Z"
        }
2020-05-08T05:47:04.053Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
            "grantId": "274583910",
             "operationState": "AUTHORIZED"
2020-05-08T05:47:04.053Z - INFO - Time interval between two heartbeat request messages is: 30.189, limit
2020-05-08T05:47:04.069Z - INFO - Response message contains measReportConfig
2020-05-08T05:47:04.069Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
            "cbsdld": "001415Mock-SAS0001601",
             "grantId": "274583910",
             "measReportConfig": [
                 "RECEIVED_POWER_WITH_GRANT"
```



```
"response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:50:24Z"
        }
    ]
2020-05-08T05:47:34.305Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
        {
            "cbsdld": "001415Mock-SAS0001601",
             "grantId": "274583910",
             "measReport": {
                 "rcvdPowerMeasReports": [
                         "measBandwidth": 10000000,
                         "measFrequency": 3615000000,
                         "measRcvdPower": -60
                     },
                         "measBandwidth": 10000000,
                         "measFrequency": 3625000000,
                         "measRcvdPower": -60
                1
             "operationState": "AUTHORIZED"
        }
    ]
2020-05-08T05:47:34:305Z - INFO - Time interval between two heartbeat request messages is: 30.251, limit
is: 65.0
2020-05-08T05:47:34.305Z - INFO - measReport received in heartbeat message
2020-05-08T05:47:34.319Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
            "cbsdld": "001415Mock-SAS0001601",
            "grantId": "274583910",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:50:54Z"
        }
    1
2020-05-08T05:48:04.496Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
            "grantId": "274583910",
             "operationState": "AUTHORIZED"
        }
    ]
2020-05-08T05:48:04.496Z - INFO - Time interval between two heartbeat request messages is: 30.191, limit
is: 65.0
2020-05-08T05:48:04.496Z - INFO - engine sent successfully, the response to CBRS : {
```



```
"heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "274583910",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:51:24Z"
        }
    1
2020-05-08T05:48:34.778Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "274583910",
             "operationState": "AUTHORIZED"
2020-05-08T05:48:34.778Z - INFO - Time interval between two heartbeat request messages is: 30.282, limit
is: 65.0
2020-05-08T05:48:34.778Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "274583910",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:51:54Z"
        }
    ]
2020-05-08T05:49:05.051Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "274583910",
             "operationState": "AUTHORIZED"
    ]
2020-05-08T05:49:05.051Z - INFO - Time interval between two heartbeat request messages is: 30.273, limit
2020-05-08T05:49:05.065Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "274583910",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:52:25Z"
        }
    1
2020-05-08T05:49:35.299Z - INFO - heartbeat request from CBRS : {
```



```
"heartbeatRequest": [
            "cbsdld": "001415Mock-SAS0001601",
             "grantId": "274583910",
             "operationState": "AUTHORIZED"
    ]
2020-05-08T05:49:35.299Z - INFO - Time interval between two heartbeat request messages is: 30.249, limit
2020-05-08T05:49:35.299Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "274583910",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:52:55Z"
        }
    ]
2020-05-08T05:49:36.410Z - INFO - arrived to nstep starting question answer session with the technician
2020-05-08T05:49:47.128Z - INFO - The final result of the test: WINNF.FT.C.MES.4 is - passed
```

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4 CBSD Relinquishment Process

```
WINNF.FT.C.RLQ.1
2020-05-08T05:52:20.877Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2020-05-08T05:52:20.877Z - INFO - the selected test from the user : WINNF.FT.C.RLQ.1 is starting now
2020-05-08T05:54:20.549Z - INFO - registration request from CBRS : {
    "registrationRequest": [
        {
            "cbsdSerialNumber": "0001601",
            "fccld": "001415",
            "userId": "7zY6fG"
        }
2020-05-08T05:54:20.581Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
            "cbsdld": "001415Mock-SAS0001601",
            "response": {
                 "responseCode": 0
        }
    1
2020-05-08T05:54:24.846Z - INFO - grant request from CBRS : {
    "grantRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "operationParam": {
                 "maxEirp": 27,
                 "operationFrequencyRange": {
                     "highFrequency": 3635000000,
                     "lowFrequency": 3615000000
            }
        }
    1
2020-05-08T05:54:24.861Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
             "cbsdld": "001415Mock-SAS0001601",
            "channelType": "GAA",
            "grantExpireTime": "2020-05-15T05:54:24Z",
             "grantId": "328406250",
            "heartbeatInterval": 60,
            "response": {
                 "responseCode": 0
        }
    1
2020-05-08T05:54:55.046Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdId": "001415Mock-SAS0001601",
             "grantId": "328406250",
```

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```
"operationState": "GRANTED"
        }
    1
2020-05-08T05:54:55.046Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "328406250",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:58:15Z"
        }
    1
2020-05-08T05:55:25.244Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "328406250",
             "operationState": "AUTHORIZED"
    1
2020-05-08T05:55:25.244Z - INFO - Time interval between two heartbeat request messages is: 30.198, limit
2020-05-08T05:55:25.259Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "328406250",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T05:58:45Z"
        }
2020-05-08T05:55:38.167Z - INFO - relinquishment request from CBRS : {
    "relinquishmentRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "328406250"
    1
2020-05-08T05:55:38.167Z - INFO - engine sent successfully, the response to CBRS : {
    "relinquishmentResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "328406250",
             "response": {
                 "responseCode": 0
        }
    ]
}
```



2020-05-08T05:55:39.463Z - INFO - arrived to nstep starting question answer session with the technician 2020-05-08T05:55:39.463Z - INFO - the question is : Did CBSD1 cease RF transmission before receipt of Relinquishment Request by Test Harness? please choose one of the answers : 2020-05-08T05:55:44.308Z - INFO - for the question : Did CBSD1 cease RF transmission before receipt of Relinquishment Request by Test Harness? , the user choose y 2020-05-08T05:55:45.371Z - INFO - The final result of the test : WINNF.FT.C.RLQ.1 is - passed	

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5 CBSD Deregistration Process

WINNF.FT.C.DRG.1 2020-05-08T06:02:35.961Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13 2020-05-08T06:02:35.961Z - INFO - the selected test from the user : WINNF.FT.C.DRG.1 is starting now 2020-05-08T06:03:05.243Z - INFO - registration request from CBRS : { "registrationRequest": [{ "cbsdSerialNumber": "0001601", "fccld": "001415", "userId": "7zY6fG" } 2020-05-08T06:03:05.243Z - INFO - engine sent successfully, the response to CBRS : { "registrationResponse": ["cbsdld": "001415Mock-SAS0001601", "response": { "responseCode": 0 } 1 2020-05-08T06:03:09.447Z - INFO - grant request from CBRS : { "grantRequest": ["cbsdld": "001415Mock-SAS0001601", "operationParam": { "maxEirp": 27, "operationFrequencyRange": { "highFrequency": 3635000000, "lowFrequency": 3615000000 } } 1 2020-05-08T06:03:09.447Z - INFO - engine sent successfully, the response to CBRS : { "grantResponse": ["cbsdld": "001415Mock-SAS0001601", "channelType": "GAA", "grantExpireTime": "2020-05-15T06:03:09Z", "grantId": "566131589", "heartbeatInterval": 60, "response": { "responseCode": 0 } 1 2020-05-08T06:03:39.681Z - INFO - heartbeat request from CBRS : { "heartbeatRequest": ["cbsdld": "001415Mock-SAS0001601", "grantId": "566131589",

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```
"operationState": "GRANTED"
        }
    1
2020-05-08T06:03:39.681Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "566131589",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T06:06:59Z"
        }
    ]
2020-05-08T06:04:09.885Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "566131589",
             "operationState": "AUTHORIZED"
    1
2020-05-08T06:04:09.885Z - INFO - Time interval between two heartbeat request messages is: 30.204, limit
2020-05-08T06:04:09.885Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "566131589",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-08T06:07:29Z"
        }
2020-05-08T06:04:19.322Z - INFO - relinquishment request from CBRS : {
    "relinquishmentRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "566131589"
    1
2020-05-08T06:04:19.322Z - INFO - engine sent successfully, the response to CBRS : {
    "relinquishmentResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "566131589",
             "response": {
                 "responseCode": 0
        }
    ]
}
```



```
2020-05-08T06:04:19.713Z - INFO - deregistration request from CBRS : {
    "deregistrationRequest": [
             "cbsdld": "001415Mock-SAS0001601"
2020-05-08T06:04:19.730Z - INFO - engine sent successfully, the response to CBRS : {
    "deregistrationResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "response": {
                 "responseCode": 0
        }
    1
2020-05-08T06:04:21.322Z - INFO - arrived to nstep starting question answer session with the technician
2020-05-08T06:04:21.322Z - INFO - the question is : Did CBSD1 cease RF transmission before receipt of
Relinquishment request (if sent) or Deregistration request at Test Harness? please choose one of the
2020-05-08T06:04:38.653Z - INFO - for the question : Did CBSD1 cease RF transmission before receipt of
Relinquishment request (if sent) or Deregistration request at Test Harness?, the user choose y
2020-05-08T06:04:39.153Z - INFO - The final result of the test: WINNF.FT.C.DRG.1 is - passed
```

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6 CBSD Security Validation

WINNF.FT.C.SCS.1

"response": {

}

1

"responseCode": 0

2020-05-07T03:33:18.167Z - INFO - arrived to nstep starting question answer session with the technician 2020-05-07T03:33:18.167Z - INFO - the question is : Were there RF transmissions from the CBSD1 during the test? please choose one of the answers :

2020-05-07T03:33:25.181Z - INFO - for the question : Were there RF transmissions from the CBSD1 during the test? , the user choose n

2020-05-07T03:33:25.697Z - INFO - The final result of the test: WINNF.FT.C.SCS.1 is - passed

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6.2 WINNF.FT.C.SCS.2

2020-05-07T05:52:22.829Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13 2020-05-07T05:52:22.829Z - INFO - the selected test from the user : WINNF.FT.C.SCS.2 is starting now

6.3 WINNF.FT.C.SCS.3

2020-05-07T06:29:14.766Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13 2020-05-07T06:29:14.766Z - INFO - the selected test from the user : WINNF.FT.C.SCS.3 is starting now

6.4 WINNF.FT.C.SCS.4

2020-05-07T06:31:58.951Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13 2020-05-07T06:31:58.951Z - INFO - the selected test from the user : WINNF.FT.C.SCS.4 is starting now

6.5 WINNF.FT.C.SCS.5

2020-05-07T06:35:14.601Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13 2020-05-07T06:35:14.601Z - INFO - the selected test from the user : WINNF.FT.C.SCS.5 is starting now

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CBSD RF POWER MEASUREMENT

```
WINNF.PT.C.HBT.1(Max Eirp = 9 dBm/MHz)
2020-05-07T03:08:42.450Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2020-05-07T03:08:42.450Z - INFO - Selected spectrum frequency is {'lowFrequency': 3615000000L,
'highFrequency': 3635000000L}
2020-05-07T03:08:42.450Z - INFO - Granted Spectrum Max Eirp = 9dBm/MHz
2020-05-07T03:08:42.450Z - INFO - the selected test from the user : PowerMeasTest is starting now
2020-05-07T03:09:42.911Z - INFO - registration request from CBRS : {
    "registrationRequest": [
             "cbsdSerialNumber": "0001601",
             "fccld": "001415",
            "userId": "7zY6fG"
    1
2020-05-07T03:09:42.927Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
             "cbsdld": "001415Mock-SAS0001601",
            "response": {
                 "responseCode": 0
        }
2020-05-07T03:09:47.084Z - INFO - grant request from CBRS : {
    "grantRequest": [
             "cbsdld": "001415Mock-SAS0001601",
            "operationParam": {
                 "maxEirp": 13,
                 "operationFrequencyRange": {
                     "highFrequency": 3635000000,
                     "lowFrequency": 3615000000
            }
        }
    ]
2020-05-07T03:09:47.098Z - INFO - The requested maxEirp value is too high
2020-05-07T03:09:47.098Z - INFO - The Grant response code is not 0, applicable spectrum parameters have
been sent out.
2020-05-07T03:09:47.098Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "operationParam": {
                 "maxEirp": 9,
                 "operationFrequencyRange": {
                     "highFrequency": 3635000000,
                     "lowFrequency": 3615000000
                }
             "response": {
                 "responseCode": 400
```



```
}
        }
    1
2020-05-07T03:10:17.816Z - INFO - grant request from CBRS : {
    "grantRequest": [
        {
             "cbsdld": "001415Mock-SAS0001601",
             "operationParam": {
                 "maxEirp": 9,
                 "operationFrequencyRange": {
                     "highFrequency": 3635000000,
                     "lowFrequency": 3615000000
                 }
            }
        }
    1
2020-05-07T03:10:17.816Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
        {
             "cbsdld": "001415Mock-SAS0001601",
             "channelType": "GAA",
             "grantExpireTime": "2020-05-14T03:10:17Z",
             "grantId": "198204939",
             "heartbeatInterval": 60,
             "response": {
                 "responseCode": 0
        }
    ]
2020-05-07T03:10:48.059Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "198204939",
             "operationState": "GRANTED"
        }
    ]
2020-05-07T03:10:48.059Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
        {
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "198204939",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-07T03:14:08Z"
        }
    ]
}
```



```
WINNF.PT.C.HBT.1(Max Eirp = 16 dBm/MHz)
6.7
2020-05-07T03:03:48.061Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2020-05-07T03:03:48.061Z - INFO - Selected spectrum frequency is {'lowFrequency': 3615000000L,
'highFrequency': 3635000000L}
2020-05-07T03:03:48.061Z - INFO - Granted Spectrum Max Eirp = 16dBm/MHz
2020-05-07T03:03:48.061Z - INFO - the selected test from the user : PowerMeasTest is starting now
2020-05-07T03:04:41.121Z - INFO - registration request from CBRS : {
    "registrationRequest": [
            "cbsdSerialNumber": "0001601",
            "fccld": "001415".
            "userId": "7zY6fG"
    1
2020-05-07T03:04:41.135Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
             "cbsdld": "001415Mock-SAS0001601",
            "response": {
                 "responseCode": 0
        }
    1
2020-05-07T03:04:45.292Z - INFO - grant request from CBRS : {
    "grantRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "operationParam": {
                 "maxEirp": 20,
                 "operationFrequencyRange": {
                     "highFrequency": 3635000000,
                     "lowFrequency": 3615000000
            }
        }
    1
2020-05-07T03:04:45.292Z - INFO - The requested maxEirp value is too high
2020-05-07T03:04:45.308Z - INFO - The Grant response code is not 0, applicable spectrum parameters have
been sent out.
2020-05-07T03:04:45.308Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
            "cbsdld": "001415Mock-SAS0001601",
             "operationParam": {
                 "maxEirp": 16,
                 "operationFrequencyRange": {
                     "highFrequency": 3635000000,
                     "lowFrequency": 3615000000
                }
             "response": {
                 "responseCode": 400
        }
    1
```

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```
2020-05-07T03:05:15.822Z - INFO - grant request from CBRS : {
    "grantRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "operationParam": {
                 "maxEirp": 16,
                 "operationFrequencyRange": {
                     "highFrequency": 3635000000,
                     "lowFrequency": 3615000000
                 }
            }
        }
    ]
2020-05-07T03:05:15.822Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "channelType": "GAA",
             "grantExpireTime": "2020-05-14T03:05:15Z",
             "grantId": "327740132",
             "heartbeatInterval": 60,
             "response": {
                 "responseCode": 0
        }
    ]
2020-05-07T03:05:46.055Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "327740132",
             "operationState": "GRANTED"
        }
    ]
2020-05-07T03:05:46.055Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "327740132",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-07T03:09:06Z"
    ]
}
```

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```
WINNF.PT.C.HBT.1(Max Eirp = 23 dBm/MHz)
2020-05-07T02:54:02.220Z - INFO - WINNF TEST HARNESS RELEASE: 1.0.0.3 - 2018-November-13
2020-05-07T02:54:02.220Z - INFO - Selected spectrum frequency is {'lowFrequency': 3615000000L,
'highFrequency': 3635000000L}
2020-05-07T02:54:02.220Z - INFO - Granted Spectrum Max Eirp = 23dBm/MHz
2020-05-07T02:54:02.220Z - INFO - the selected test from the user : PowerMeasTest is starting now
2020-05-07T02:55:54.642Z - INFO - registration request from CBRS : {
    "registrationRequest": [
            "cbsdSerialNumber": "0001601",
            "fccld": "001415".
            "userId": "7zY6fG"
    1
2020-05-07T02:55:54.658Z - INFO - engine sent successfully, the response to CBRS : {
    "registrationResponse": [
             "cbsdld": "001415Mock-SAS0001601",
            "response": {
                 "responseCode": 0
        }
    1
2020-05-07T02:55:54.986Z - INFO - grant request from CBRS : {
    "grantRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "operationParam": {
                 "maxEirp": 27,
                 "operationFrequencyRange": {
                     "highFrequency": 3635000000,
                     "lowFrequency": 3615000000
            }
        }
    1
2020-05-07T02:55:54.986Z - INFO - The requested maxEirp value is too high
2020-05-07T02:55:54.986Z - INFO - The Grant response code is not 0, applicable spectrum parameters have
been sent out.
2020-05-07T02:55:54.986Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
            "cbsdld": "001415Mock-SAS0001601",
             "operationParam": {
                 "maxEirp": 23,
                 "operationFrequencyRange": {
                     "highFrequency": 3635000000,
                     "lowFrequency": 3615000000
                }
             "response": {
                 "responseCode": 400
        }
    1
```

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```
2020-05-07T02:56:25.183Z - INFO - grant request from CBRS : {
    "grantRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "operationParam": {
                 "maxEirp": 23,
                 "operationFrequencyRange": {
                     "highFrequency": 3635000000,
                     "lowFrequency": 3615000000
                 }
            }
        }
    ]
2020-05-07T02:56:25.183Z - INFO - engine sent successfully, the response to CBRS : {
    "grantResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "channelType": "GAA",
             "grantExpireTime": "2020-05-14T02:56:25Z",
             "grantId": "202041205",
             "heartbeatInterval": 60,
             "response": {
                 "responseCode": 0
        }
    1
2020-05-07T02:56:55.415Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "202041205",
             "operationState": "GRANTED"
        }
    1
2020-05-07T02:56:55.431Z - INFO - engine sent successfully, the response to CBRS : {
    "heartbeatResponse": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "202041205",
             "response": {
                 "responseCode": 0
             "transmitExpireTime": "2020-05-07T03:00:15Z"
        }
2020-05-07T02:57:27.805Z - INFO - heartbeat request from CBRS : {
    "heartbeatRequest": [
             "cbsdld": "001415Mock-SAS0001601",
             "grantId": "202041205",
             "operationState": "AUTHORIZED"
        }
    ]
```



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