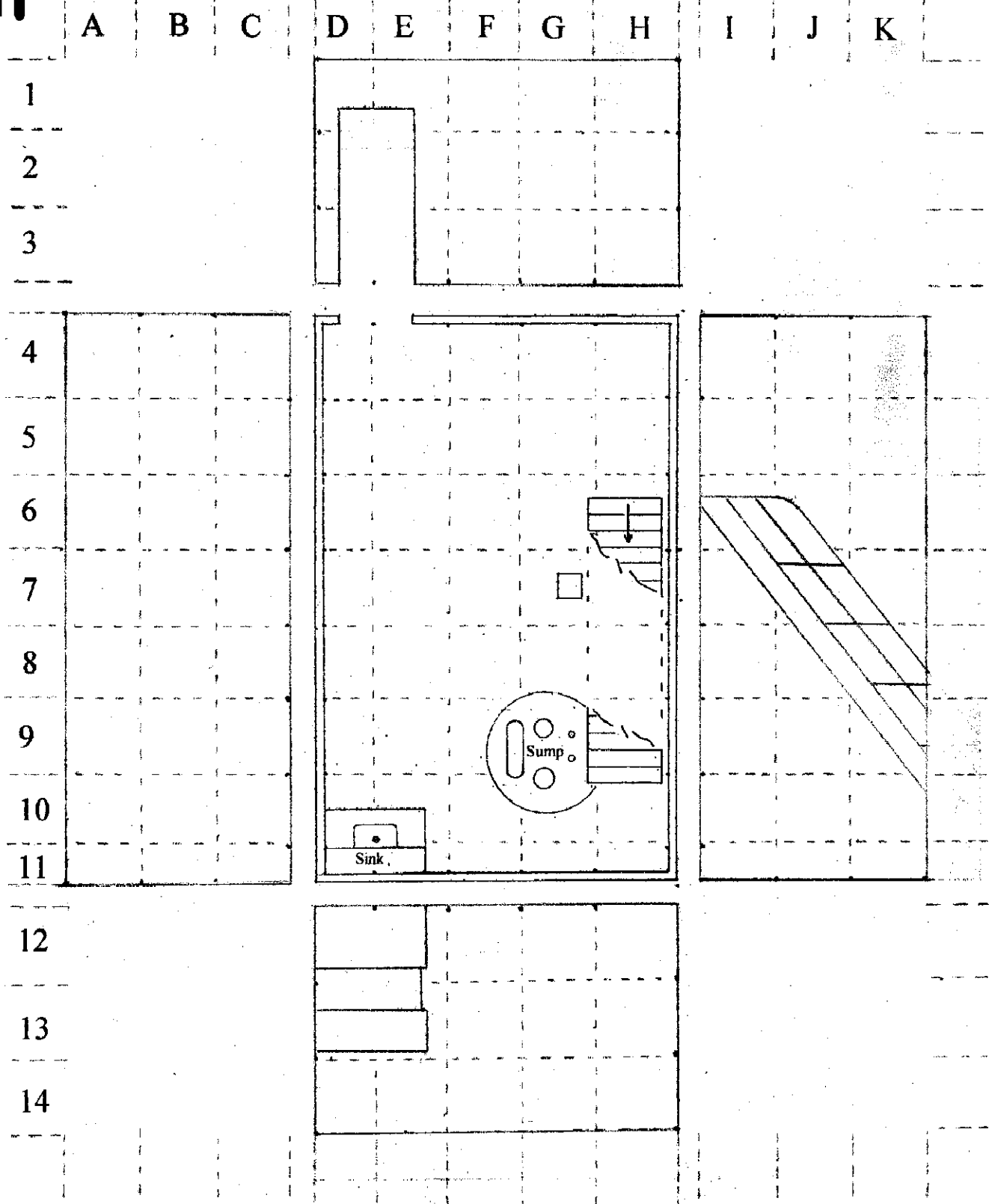


# Appendix K

## Room 01 Final Status Survey Data

# Room 01 Grid Map



Grids are 1 Meter by 1 Meter

RADIOLOGICAL SURVEY  
SIGN TEST FORM

| Survey Location: Walter Reed AIR  |                         | Instrument: Model 2224                     |                                | DCGL <sub>m</sub> dpm/100cm <sup>2</sup> : 1,500  |   |      |
|---|-------------------------|--|--------------------------------|---|---|------|
| Survey Unit: Room 01  |                         | SN: 143040                                 |                                |   |   |      |
| Survey Unit Classification: Class 3   |                         | Detector: Model 43-37                      |                                |   |   |      |
| Survey Unit Size in Meters <sup>2</sup> : 118                               |                         | SN: 128623                                 |                                |   |   |      |
| Date: 08/16/2000  |                         | Det Size in cm <sup>2</sup> : 425          |                                |   |   |      |
| Time: 0800  |                         | Cal Due Date: 06/03/2001                   |                                |   |   |      |
| Surveyor: Gary Nason, Nancy Morey   |                         | Bkg Time: 1                                |                                | Minutes   |   |      |
| Reviewed by: Dan Spicuzza   |                         | Sample Count Time: 1                       |                                | Minutes   |   |      |
| Type of Survey: Beta-Gamma Scan and Direct Measurement Survey of Floor      |                         | Surface Efficiency: 0.8                    |                                |   |   |      |
|   |                         | Surveyor Efficiency Factor: 0.5            |                                |   |   |      |
|   |                         | Daily Bkg α: 4                             |                                | CPM   |   |      |
|   |                         | Daily Bkg βγ: 1000                         |                                | CPM   |   |      |
|   |                         | Efficiency α: 0.8                          |                                |   |   |      |
|   |                         | Efficiency βγ: 0.1                         |                                |   |   |      |
|   |                         | L <sub>α</sub> : 4.7                       |                                | CPM   |   |      |
|   |                         | L <sub>βγ</sub> : 12.3                     |                                | CPM   |   |      |
|   |                         | Direct Measurement MDC α: 4.5              |                                | dpm/100cm <sup>2</sup>                            |   |      |
|   |                         | S <sub>α</sub> : 1.69                      |                                |   |   |      |
|   |                         | B <sub>α</sub> : 0.27                      |                                |   |   |      |
|   |                         | Scan MDCR α: 25.4                          |                                | CPM   |   |      |
|   |                         | Scan MDC βγ: 13.2                          |                                | dpm/100cm <sup>2</sup>                            |   |      |
|   |                         | L <sub>αβγ</sub> : 73.7                    |                                | CPM   |   |      |
|   |                         | L <sub>βγ</sub> : 150.0                    |                                | CPM   |   |      |
|   |                         | Direct Measurement MDC βγ: 441.3           |                                | dpm/100cm <sup>2</sup>                            |   |      |
|   |                         | S <sub>βγ</sub> : 26.78                    |                                |   |   |      |
|   |                         | B <sub>βγ</sub> : 66.67                    |                                |   |   |      |
|   |                         | Scan MDCR βγ: 402                          |                                | CPM   |   |      |
|   |                         | Scan MDC βγ: 1670.9                        |                                | dpm/100cm <sup>2</sup>                            |   |      |
| Survey Data Location  | Scan Survey Results CPM | Scan Survey Results DPM/100cm <sup>2</sup> | Direct Measurement Reading CPM | Direct Measurement Reading DPM/100cm <sup>2</sup> | DCGL <sub>m</sub> - Data DPM/100cm <sup>2</sup> | Sign |
| D-4   | 1000                    | 0.00                                       | 1032                           | 80.00   | 1,420   | 1    |
| E-4   | 1000                    | 0.00                                       | 1002                           | 5.00  | 1,495   | 1    |
| F-4   | 1000                    | 0.00                                       | 1043                           | 107.50  | 1,393   | 1    |
| G-4   | 1000                    | 0.00                                       | 1030                           | 75.00   | 1,425   | 1    |
| H-4   | 1000                    | 0.00                                       | 1021                           | 52.50   | 1,448   | 1    |
| D-5   | 1100                    | 250.00                                     | 1007                           | 17.50   | 1,483   | 1    |
| E-5   | 1000                    | 0.00                                       | 1014                           | 35.00   | 1,465   | 1    |
| F-5   | 1000                    | 0.00                                       | 1029                           | 72.50   | 1,428   | 1    |
| G-5   | 1000                    | 0.00                                       | 1040                           | 100.00  | 1,400   | 1    |
| H-5   | 1000                    | 0.00                                       | 1019                           | 47.50   | 1,453   | 1    |
| D-6   | 1000                    | 0.00                                       | 1020                           | 50.00   | 1,450   | 1    |
| E-6   | 1000                    | 0.00                                       | 1022                           | 55.00   | 1,445   | 1    |
| F-6   | 1000                    | 0.00                                       | 1032                           | 80.00   | 1,420   | 1    |
| G-6   | 1100                    | 250.00                                     | 1007                           | 17.50   | 1,483   | 1    |
| H-6   | 1000                    | 0.00                                       | 1002                           | 5.00  | 1,495   | 1    |
| D-7   | 1000                    | 0.00                                       | 1001                           | 2.50  | 1,498   | 1    |
| E-7   | 1000                    | 0.00                                       | 998                            | -5.00   | 1,505   | 1    |
| F-7   | 1100                    | 250.00                                     | 1121                           | 302.50  | 1,198   | 1    |
| G-7   | 1100                    | 250.00                                     | 1004                           | 10.00   | 1,490   | 1    |
| H-7   | 1000                    | 0.00                                       | 1089                           | 222.50  | 1,278   | 1    |
| D-8   | 1000                    | 0.00                                       | 1005                           | 12.50   | 1,488   | 1    |
| E-8   | 1000                    | 0.00                                       | 1008                           | 20.00   | 1,480   | 1    |
| F-8   | 1100                    | 250.00                                     | 1029                           | 72.50   | 1,428   | 1    |
| G-8   | 1000                    | 0.00                                       | 1001                           | 2.50  | 1,498   | 1    |
| H-8   | 1000                    | 0.00                                       | 1008                           | 20.00   | 1,480   | 1    |
| D-9   | 1000                    | 0.00                                       | 1027                           | 67.50   | 1,433   | 1    |
| E-9   | 1000                    | 0.00                                       | 1006                           | 15.00   | 1,485   | 1    |
| F-9   | 1000                    | 0.00                                       | 1023                           | 57.50   | 1,443   | 1    |
| G-9   | 1000                    | 0.00                                       | 1031                           | 77.50   | 1,423   | 1    |
| H-9   | 1000                    | 0.00                                       | 1012                           | 30.00   | 1,470   | 1    |
| D-10  | 1100                    | 250.00                                     | 1097                           | 242.50  | 1,258   | 1    |
| E-10  | 1000                    | 0.00                                       | 1084                           | 210.00  | 1,290   | 1    |
| F-10  | 1000                    | 0.00                                       | 1031                           | 77.50   | 1,423   | 1    |
| G-10  | 1000                    | 0.00                                       | 1071                           | 177.50  | 1,323   | 1    |
| H-10  | 1000                    | 0.00                                       | 1020                           | 50.00   | 1,450   | 1    |
| D-11  | 1000                    | 0.00                                       | 1002                           | 5.00  | 1,495   | 1    |
| E-11  | 1000                    | 0.00                                       | 1019                           | 47.50   | 1,453   | 1    |
| F-11  | 1000                    | 0.00                                       | 1005                           | 12.50   | 1,488   | 1    |
| G-11  | 1100                    | 250.00                                     | 1083                           | 207.50  | 1,293   | 1    |
| H-11  | 1000                    | 0.00                                       | 1057                           | 142.50  | 1,358   | 1    |
| Remarks: Micro/hr readings at 1 meter from surfaces of all grids is 4 μR/hr |                         | Critical Value = 10                        |                                | Number of positive differences S* = 40            |   |      |
| Model 19 S/N:133178   |                         | Standard Deviation = 75.34                 |                                | Number of Required Date Points: 14                |   |      |
| Grids are 1 m by 1 m  |                         | Mean Value = 72.00                         |                                | Sign P: 1.0                                       |   |      |
|   |                         | Median = 51.25                             |                                | LBGR: 750   |   |      |
|   |                         |  |                                | Δα: 9.95  |   |      |

RADIOLOGICAL SURVEY  
SIGN TEST FORM

| Survey Location: Walter Reed AIR  |                         | Instrument: Model 2224                     |                                | DCGL <sub>w</sub> dpm/100cm <sup>2</sup> : 100    |   |      |
|---|-------------------------|--|--------------------------------|---|---|------|
| Survey Unit: Room 01  |                         | SN: 143040                                 |                                |   |   |      |
| Survey Unit Classification: Class 3   |                         | Detector: Model 43-37                      |                                |   |   |      |
| Survey Unit Size in Meters <sup>2</sup> : 118                               |                         | SN: 128623                                 |                                |   |   |      |
| Date: 08/16/2000  |                         | Det Size in cm <sup>2</sup> : 425          |                                |   |   |      |
| Time: 1130  |                         | Cal Due Date: 06/03/2001                   |                                |   |   |      |
| Surveyor: Gary Nason, Nancy Morey   |                         | Bkg Time: 1                                |                                | Minutes   |   |      |
| Reviewed by: Dan Spicuzza   |                         | Sample Count Time: 1                       |                                | Minutes   |   |      |
| Type of Survey: Alpha Scan and Direct Measurement Survey of Floor           |                         | Surface Efficiency: 0.6                    |                                |   |   |      |
|   |                         | Surveyor Efficiency Factor: 0.5            |                                |   |   |      |
|   |                         | Daily Bkg α: 4                             |                                | CPM   |   |      |
|   |                         | Daily Bkg βγ: 1000                         |                                | CPM   |   |      |
|   |                         | Efficiency α: 0.8                          |                                |   |   |      |
|   |                         | Efficiency βγ: 0.1                         |                                |   |   |      |
|   |                         | L <sub>α</sub> : 4.7                       |                                | CPM   |   |      |
|   |                         | L <sub>βγ</sub> : 12.3                     |                                | CPM   |   |      |
|   |                         | Direct Measurement MDC α: 6.0              |                                | dpm/100cm <sup>2</sup>                            |   |      |
|   |                         | S <sub>α</sub> : 1.69                      |                                |   |   |      |
|   |                         | B <sub>α</sub> : 0.27                      |                                |   |   |      |
|   |                         | Scan MDCR α: 25.4                          |                                | CPM   |   |      |
|   |                         | Scan MDC α: 17.6                           |                                | dpm/100cm <sup>2</sup>                            |   |      |
|   |                         | L <sub>αβγ</sub> : 73.7                    |                                | CPM   |   |      |
|   |                         | L <sub>βγ</sub> : 150.0                    |                                | CPM   |   |      |
|   |                         | Direct Measurement MDC βγ: 588.4           |                                | dpm/100cm <sup>2</sup>                            |   |      |
|   |                         | S <sub>βγ</sub> : 26.78                    |                                |   |   |      |
|   |                         | B <sub>βγ</sub> : 66.67                    |                                |   |   |      |
|   |                         | Scan MDCR βγ: 402                          |                                | CPM   |   |      |
|   |                         | Scan MDC βγ: 2227.9                        |                                | dpm/100cm <sup>2</sup>                            |   |      |
| Survey Data Location  | Scan Survey Results CPM | Scan Survey Results DPM/100cm <sup>2</sup> | Direct Measurement Reading CPM | Direct Measurement Reading DPM/100cm <sup>2</sup> | DCGL <sub>w</sub> - Data DPM/100cm <sup>2</sup> | Sign |
| D-4   | 5                       | 0.00                                       | 8                              | 9.38  | 91  | 1    |
| E-4   | 10                      | 15.63                                      | 11                             | 18.75   | 81  | 1    |
| F-4   | 5                       | 0.00                                       | 7                              | 6.25  | 94  | 1    |
| G-4   | 10                      | 15.63                                      | 11                             | 18.75   | 81  | 1    |
| H-4   | 5                       | 0.00                                       | 6                              | 3.13  | 97  | 1    |
| D-5   | 10                      | 15.63                                      | 12                             | 21.88   | 78  | 1    |
| E-5   | 5                       | 0.00                                       | 7                              | 6.25  | 94  | 1    |
| F-5   | 10                      | 15.63                                      | 9                              | 12.50   | 88  | 1    |
| G-5   | 10                      | 15.63                                      | 11                             | 18.75   | 81  | 1    |
| H-5   | 5                       | 0.00                                       | 7                              | 6.25  | 94  | 1    |
| D-6   | 5                       | 0.00                                       | 8                              | 9.38  | 91  | 1    |
| E-6   | 5                       | 0.00                                       | 6                              | 3.13  | 97  | 1    |
| F-6   | 5                       | 0.00                                       | 6                              | 3.13  | 97  | 1    |
| G-6   | 5                       | 0.00                                       | 4                              | -3.13   | 103   | 1    |
| H-6   | 10                      | 15.63                                      | 13                             | 25.00   | 75  | 1    |
| D-7   | 5                       | 0.00                                       | 6                              | 3.13  | 97  | 1    |
| E-7   | 5                       | 0.00                                       | 5                              | 0.00  | 100   | 1    |
| F-7   | 10                      | 15.63                                      | 14                             | 28.13   | 72  | 1    |
| G-7   | 10                      | 15.63                                      | 13                             | 25.00   | 75  | 1    |
| H-7   | 10                      | 15.63                                      | 11                             | 18.75   | 81  | 1    |
| D-8   | 10                      | 15.63                                      | 13                             | 25.00   | 75  | 1    |
| E-8   | 10                      | 15.63                                      | 12                             | 21.88   | 78  | 1    |
| F-8   | 5                       | 0.00                                       | 8                              | 9.38  | 91  | 1    |
| G-8   | 10                      | 15.63                                      | 9                              | 12.50   | 88  | 1    |
| H-8   | 10                      | 15.63                                      | 13                             | 25.00   | 75  | 1    |
| D-9   | 10                      | 15.63                                      | 8                              | 9.38  | 91  | 1    |
| E-9   | 10                      | 15.63                                      | 12                             | 21.88   | 78  | 1    |
| F-9   | 10                      | 15.63                                      | 14                             | 28.13   | 72  | 1    |
| G-9   | 5                       | 0.00                                       | 7                              | 6.25  | 94  | 1    |
| H-9   | 5                       | 0.00                                       | 8                              | 9.38  | 91  | 1    |
| D-10  | 10                      | 15.63                                      | 6                              | 3.13  | 97  | 1    |
| E-10  | 10                      | 15.63                                      | 11                             | 18.75   | 81  | 1    |
| F-10  | 5                       | 0.00                                       | 8                              | 9.38  | 91  | 1    |
| G-10  | 10                      | 15.63                                      | 12                             | 21.88   | 78  | 1    |
| H-10  | 5                       | 0.00                                       | 6                              | 3.13  | 97  | 1    |
| D-11  | 5                       | 0.00                                       | 8                              | 9.38  | 91  | 1    |
| E-11  | 5                       | 0.00                                       | 6                              | 3.13  | 97  | 1    |
| F-11  | 10                      | 15.63                                      | 14                             | 28.13   | 72  | 1    |
| G-11  | 5                       | 0.00                                       | 7                              | 6.25  | 94  | 1    |
| H-11  | 10                      | 15.63                                      | 9                              | 12.50   | 88  | 1    |
| Remarks: Micro/hr readings at 1 meter from surfaces of all grids is 4 μR/hr |                         | Critical Value =                           | 10                             | Number of positive differences S* =               | 40  |      |
| Model 19 S/N: 133178  |                         | Standard Deviation =                       | 9.02                           | Number of Required Data Points:                   | 14  |      |
| Grids are 1 m by 1 m  |                         | Mean Value =                               | 12.97                          | Sign P:   | 1.0   |      |
|   |                         | Median =                                   | 9.375                          | LBGR:   | 100   |      |
|   |                         |  |                                | Δα:   | 5.54  |      |

RADIOLOGICAL SURVEY  
SIGN TEST FORM

| Survey Location:                          | Walter Reed AIR  |  | Instrument:                    | Model 2224  |   |       |
|---|--|--|--------------------------------|---|---|-------|
| Survey Unit:                              | Room 01  |  | SN:                            | 143048  | DCGL <sub>w</sub> dpm/100cm <sup>2</sup> :      | 1,500 |
| Survey Unit Classification:               | Class 3  |  | Detector:                      | Model 43-68                                       |   |       |
| Survey Unit Size in Meters <sup>2</sup> : | 118  |  | SN:                            | 147960  |   |       |
| Date:                                     | 08/16/2000   |  | Det Size in cm <sup>2</sup> :  | 125   |   |       |
| Time:                                     | 1400   |  | Cal Due Date:                  | 06/03/2001  |   |       |
| Surveyor:                                 | Gary Nason, Nancy Morey                                |  | Bkg Time:                      | 1   | Minutes   |       |
| Reviewed by:                              | Dan Spicuzza   |  | Sample Count Time:             | 1   | Minutes   |       |
| Type of Survey:                           | Beta-Gamma Scan and Direct Measurement Survey of Walls |  | Surface Efficiency:            | 0.8   |   |       |
|   |  |  | Surveyor Efficiency Factor:    | 0.5   |   |       |
|   |  |  | Daily Bkg α:                   | 4   | CPM   |       |
|   |  |  | Daily Bkg βγ:                  | 150   | CPM   |       |
|   |  |  | Efficiency α:                  | 0.8   |   |       |
|   |  |  | Efficiency βγ:                 | 0.12  |   |       |
|   |  |  | L <sub>C</sub> α:              | 4.7   | CPM   |       |
|   |  |  | L <sub>D</sub> α:              | 12.3  | CPM   |       |
|   |  |  | Direct Measurement MDC α:      | 15.4  | dpm/100cm <sup>2</sup>                          |       |
|   |  |  | S <sub>α</sub> :               | 1.69  |   |       |
|   |  |  | B <sub>α</sub> :               | 0.27  |   |       |
|   |  |  | Scan MDCR α:                   | 25.4  | CPM   |       |
|   |  |  | Scan MDC α:                    | 44.9  | dpm/100cm <sup>2</sup>                          |       |
|   |  |  | L <sub>C</sub> βγ:             | 28.5  | CPM   |       |
|   |  |  | L <sub>D</sub> βγ:             | 60.0  | CPM   |       |
|   |  |  | Direct Measurement MDC βγ:     | 499.6   | dpm/100cm <sup>2</sup>                          |       |
|   |  |  | S <sub>βγ</sub> :              | 10.37   |   |       |
|   |  |  | B <sub>βγ</sub> :              | 10.00   |   |       |
|   |  |  | Scan MDCR βγ:                  | 156   | CPM   |       |
|   |  |  | Scan MDC βγ:                   | 1833.6  | dpm/100cm <sup>2</sup>                          |       |
| Survey Data Location                      | Scan Survey Results CPM                                | Scan Survey Results DPM/100cm <sup>2</sup> | Direct Measurement Reading CPM | Direct Measurement Reading DPM/100cm <sup>2</sup> | DCGL <sub>w</sub> - Data DPM/100cm <sup>2</sup> | Sign  |
| D-14                                      | 190  | 266.67                                     | 198                            | 320.00  | 1,180   | 1     |
| E-14                                      | 200  | 333.33                                     | 204                            | 360.00  | 1,140   | 1     |
| F-14                                      | 190  | 266.67                                     | 195                            | 300.00  | 1,200   | 1     |
| G-14                                      | 180  | 200.00                                     | 189                            | 260.00  | 1,240   | 1     |
| H-14                                      | 190  | 266.67                                     | 193                            | 286.67  | 1,213   | 1     |
| D-13                                      | 190  | 266.67                                     | 200                            | 333.33  | 1,167   | 1     |
| E-13                                      | 200  | 333.33                                     | 206                            | 373.33  | 1,127   | 1     |
| F-13                                      | 190  | 266.67                                     | 194                            | 293.33  | 1,207   | 1     |
| G-13                                      | 200  | 333.33                                     | 201                            | 340.00  | 1,160   | 1     |
| H-13                                      | 190  | 266.67                                     | 195                            | 300.00  | 1,200   | 1     |
| D-12                                      | 200  | 333.33                                     | 198                            | 320.00  | 1,180   | 1     |
| E-12                                      | 180  | 200.00                                     | 188                            | 253.33  | 1,247   | 1     |
| F-12                                      | 200  | 333.33                                     | 208                            | 386.67  | 1,113   | 1     |
| G-12                                      | 190  | 266.67                                     | 196                            | 306.67  | 1,193   | 1     |
| H-12                                      | 190  | 266.67                                     | 198                            | 320.00  | 1,180   | 1     |
| A-11                                      | 200  | 333.33                                     | 206                            | 373.33  | 1,127   | 1     |
| B-11                                      | 190  | 266.67                                     | 196                            | 306.67  | 1,193   | 1     |
| C-11                                      | 200  | 333.33                                     | 202                            | 346.67  | 1,153   | 1     |
| I-11                                      | 190  | 266.67                                     | 194                            | 293.33  | 1,207   | 1     |
| J-11                                      | 200  | 333.33                                     | 209                            | 393.33  | 1,107   | 1     |
| K-11                                      | 190  | 266.67                                     | 197                            | 313.33  | 1,187   | 1     |
| A-10                                      | 220  | 466.67                                     | 225                            | 500.00  | 1,000   | 1     |
| B-10                                      | 200  | 333.33                                     | 207                            | 380.00  | 1,120   | 1     |
| C-10                                      | 210  | 400.00                                     | 215                            | 433.33  | 1,067   | 1     |
| I-10                                      | 210  | 400.00                                     | 219                            | 460.00  | 1,040   | 1     |
| J-10                                      | 190  | 266.67                                     | 193                            | 286.67  | 1,213   | 1     |
| K-10                                      | 210  | 400.00                                     | 208                            | 386.67  | 1,113   | 1     |
| A-9                                       | 190  | 266.67                                     | 199                            | 326.67  | 1,173   | 1     |
| B-9                                       | 200  | 333.33                                     | 204                            | 360.00  | 1,140   | 1     |
| C-9                                       | 200  | 333.33                                     | 209                            | 393.33  | 1,107   | 1     |
| I-9                                       | 190  | 266.67                                     | 193                            | 286.67  | 1,213   | 1     |
| J-9                                       | 200  | 333.33                                     | 208                            | 386.67  | 1,113   | 1     |
| K-9                                       | 200  | 333.33                                     | 211                            | 406.67  | 1,093   | 1     |
| A-8                                       | 190  | 266.67                                     | 192                            | 280.00  | 1,220   | 1     |
| B-8                                       | 210  | 400.00                                     | 217                            | 446.67  | 1,053   | 1     |
| C-8                                       | 220  | 466.67                                     | 225                            | 500.00  | 1,000   | 1     |
| I-8                                       | 200  | 333.33                                     | 207                            | 380.00  | 1,120   | 1     |
| J-8                                       | 200  | 333.33                                     | 204                            | 360.00  | 1,140   | 1     |
| K-8                                       | 210  | 400.00                                     | 212                            | 413.33  | 1,087   | 1     |
| A-7                                       | 210  | 400.00                                     | 218                            | 453.33  | 1,047   | 1     |
| B-7                                       | 220  | 466.67                                     | 214                            | 426.67  | 1,073   | 1     |
| C-7                                       | 200  | 333.33                                     | 209                            | 393.33  | 1,107   | 1     |
| I-7                                       | 210  | 400.00                                     | 216                            | 440.00  | 1,060   | 1     |
| J-7                                       | 210  | 400.00                                     | 209                            | 393.33  | 1,107   | 1     |

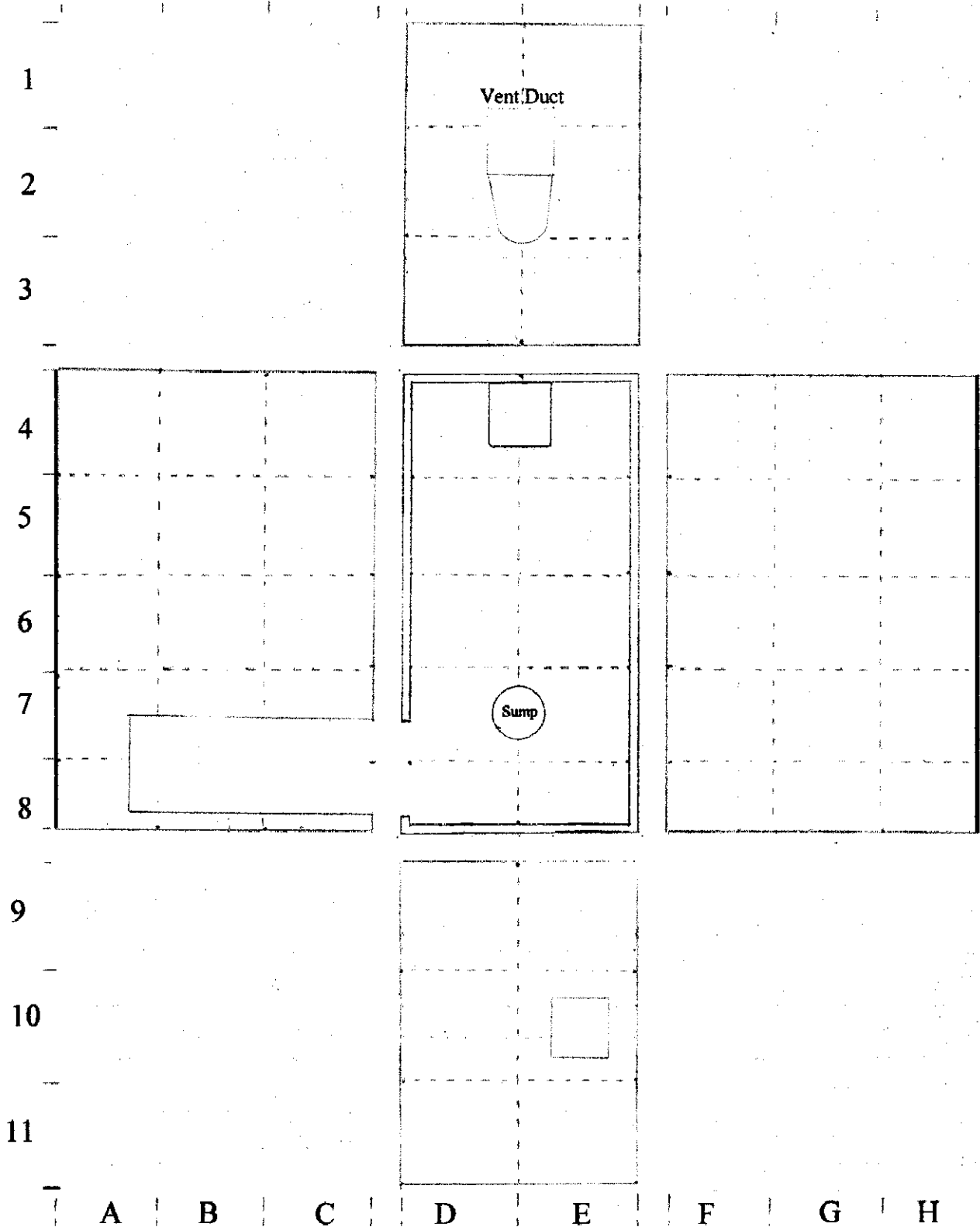
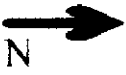
RADIOLOGICAL SURVEY  
SIGN TEST FORM

|  |  |        |                               |             |  |       |
|--|--|--------|-------------------------------|-------------|--|-------|
| Survey Location:   | Walter Reed AIR  |        | Instrument:                   | Model 2224  |  |       |
| Survey Unit:   | Room 01  |        | SN:                           | 143048      | DCGL <sub>w</sub> dpm/100cm <sup>2</sup> : | 1,500 |
| Survey Unit Classification:  | Class 3  |        | Detector:                     | Model 43-68 |  |       |
| Survey Unit Size in Meters <sup>2</sup> :                                    | 118  |        | SN:                           | 147960      |  |       |
| Date:  | 08/16/2000   |        | Det Size in cm <sup>2</sup> : | 125         |  |       |
| Time:  | 1400   |        | Cal Due Date:                 | 06/03/2001  |  |       |
| Surveyor:  | Gary Nason, Nancy Morey                                |        | Bkg Time:                     | 1           | Minutes                                    |       |
| Reviewed by:   | Dan Spicuzza   |        | Sample Count Time:            | 1           | Minutes                                    |       |
| Type of Survey:  | Beta-Gamma Scan and Direct Measurement Survey of Walls |        | Surface Efficiency:           | 0.8         |  |       |
|  |  |        | Surveyor Efficiency Factor:   | 0.5         |  |       |
|  |  |        | Daily Bkg α:                  | 4           | CPM  |       |
|  |  |        | Daily Bkg βγ:                 | 150         | CPM  |       |
|  |  |        | Efficiency α:                 | 0.8         |  |       |
|  |  |        | Efficiency βγ:                | 0.12        |  |       |
|  |  |        | L <sub>C</sub> α:             | 4.7         | CPM  |       |
|  |  |        | L <sub>D</sub> α:             | 12.3        | CPM  |       |
|  |  |        | Direct Measurement MDC α:     | 15.4        | dpm/100cm <sup>2</sup>                     |       |
|  |  |        | S <sub>iq</sub> :             | 1.69        |  |       |
|  |  |        | B <sub>iq</sub> :             | 0.27        |  |       |
|  |  |        | Scan MDCR α:                  | 25.4        | CPM  |       |
|  |  |        | Scan MDC α:                   | 44.9        | dpm/100cm <sup>2</sup>                     |       |
|  |  |        | L <sub>C</sub> βγ:            | 28.5        | CPM  |       |
|  |  |        | L <sub>D</sub> βγ:            | 60.0        | CPM  |       |
|  |  |        | Direct Measurement MDC βγ:    | 499.6       | dpm/100cm <sup>2</sup>                     |       |
|  |  |        | S <sub>βγ</sub> :             | 10.37       |  |       |
|  |  |        | B <sub>βγ</sub> :             | 10.00       |  |       |
|  |  |        | Scan MDCR βγ:                 | 156         | CPM  |       |
|  |  |        | Scan MDC βγ:                  | 1833.6      | dpm/100cm <sup>2</sup>                     |       |
| K-7  | 220  | 466.67 | 226                           | 506.67      | 993  | 1     |
| A-6  | 190  | 266.67 | 196                           | 306.67      | 1,193                                      | 1     |
| B-6  | 210  | 400.00 | 218                           | 453.33      | 1,047                                      | 1     |
| C-6  | 200  | 333.33 | 209                           | 393.33      | 1,107                                      | 1     |
| I-6  | 200  | 333.33 | 208                           | 386.67      | 1,113                                      | 1     |
| J-6  | 190  | 266.67 | 201                           | 340.00      | 1,160                                      | 1     |
| K-6  | 200  | 333.33 | 206                           | 373.33      | 1,127                                      | 1     |
| A-5  | 200  | 333.33 | 208                           | 386.67      | 1,113                                      | 1     |
| B-5  | 220  | 466.67 | 229                           | 526.67      | 973  | 1     |
| C-5  | 220  | 466.67 | 224                           | 493.33      | 1,007                                      | 1     |
| I-5  | 190  | 266.67 | 196                           | 306.67      | 1,193                                      | 1     |
| J-5  | 230  | 533.33 | 232                           | 546.67      | 953  | 1     |
| K-5  | 220  | 466.67 | 226                           | 506.67      | 993  | 1     |
| A-4  | 210  | 400.00 | 218                           | 453.33      | 1,047                                      | 1     |
| B-4  | 210  | 400.00 | 208                           | 386.67      | 1,113                                      | 1     |
| C-4  | 230  | 533.33 | 239                           | 593.33      | 907  | 1     |
| I-4  | 220  | 466.67 | 218                           | 453.33      | 1,047                                      | 1     |
| J-4  | 230  | 533.33 | 233                           | 553.33      | 947  | 1     |
| K-4  | 220  | 466.67 | 221                           | 473.33      | 1,027                                      | 1     |
| D-3  | 210  | 400.00 | 218                           | 453.33      | 1,047                                      | 1     |
| E-3  | 200  | 333.33 | 205                           | 366.67      | 1,133                                      | 1     |
| F-3  | 210  | 400.00 | 217                           | 446.67      | 1,053                                      | 1     |
| G-3  | 220  | 466.67 | 226                           | 506.67      | 993  | 1     |
| H-3  | 220  | 466.67 | 228                           | 520.00      | 980  | 1     |
| D-2  | 210  | 400.00 | 219                           | 460.00      | 1,040                                      | 1     |
| E-2  | 200  | 333.33 | 204                           | 360.00      | 1,140                                      | 1     |
| F-2  | 220  | 466.67 | 228                           | 520.00      | 980  | 1     |
| G-2  | 200  | 333.33 | 208                           | 386.67      | 1,113                                      | 1     |
| H-2  | 210  | 400.00 | 219                           | 460.00      | 1,040                                      | 1     |
| D-1  | 240  | 600.00 | 242                           | 613.33      | 887  | 1     |
| E-1  | 220  | 466.67 | 224                           | 493.33      | 1,007                                      | 1     |
| F-1  | 210  | 400.00 | 215                           | 433.33      | 1,067                                      | 1     |
| G-1  | 210  | 400.00 | 211                           | 406.67      | 1,093                                      | 1     |
| H-1  | 220  | 466.67 | 224                           | 493.33      | 1,007                                      | 1     |
| Remarks: Micro/hr readings at 1 meter from surfaces of all grids is 4 μR/hr. |  |        | Critical Value:               | 10          | Number of positive differences S+ =        | 78    |
| Model 19 S/N:133178  |  |        | Standard Deviation =          | 82.39       | Number of Required Date Points:            | 14    |
| Grids are 1 m by 1 m   |  |        | Mean Value =                  | 400.43      | Sign P:                                    | 1.0   |
|  |  |        | Median =                      | 386.67      | LBGR:                                      | 750   |
|  |  |        |                               |             | Δ/σ:                                       | 9.1   |

# Appendix L

## Room 04 Final Status Survey Data

# Room 04 Grid Map



Grids are 1 Meter by 1 Meter





RADIOLOGICAL SURVEY  
SIGN TEST FORM

| Survey Location: Walter Reed AIR                                  |                         | Instrument: Model 2224                        |                                |   |   |      |
|---|-------------------------|---|--------------------------------|---|---|------|
| Survey Unit: Room 04  |                         | SN: 143040                                    |                                | DCGL <sub>w</sub> dpm/100cm <sup>2</sup> : 100    |   |      |
| Survey Unit Classification: Class 3                               |                         | Detector: Model 43-37                         |                                |   |   |      |
| Survey Unit Size in Meters <sup>2</sup> : 62                      |                         | SN: 128623                                    |                                |   |   |      |
| Date: 08/14/2000  |                         | Det Size in cm <sup>2</sup> : 425             |                                |   |   |      |
| Time: 1500  |                         | Cal Due Date: 06/03/2001                      |                                |   |   |      |
| Surveyor: Gary Nason, Nancy Morey                                 |                         | Bkg Time: 1                                   |                                | Minutes   |   |      |
| Reviewed by: Dan Spicuzza   |                         | Sample Count Time: 1                          |                                | Minutes   |   |      |
| Type of Survey: Alpha Scan and Direct Measurement Survey of Floor |                         | Surface Efficiency: 0.6                       |                                |   |   |      |
|   |                         | Surveyor Efficiency Factor: 0.5               |                                |   |   |      |
|   |                         | Daily Bkg α: 5                                |                                | CPM   |   |      |
|   |                         | Daily Bkg β <sub>r</sub> : 1000               |                                | CPM   |   |      |
|   |                         | Efficiency α: 0.8                             |                                |   |   |      |
|   |                         | Efficiency β <sub>r</sub> : 0.1               |                                |   |   |      |
|   |                         | L <sub>C</sub> α: 5.2                         |                                | CPM   |   |      |
|   |                         | L <sub>D</sub> α: 13.4                        |                                | CPM   |   |      |
|   |                         | Direct Measurement MDC α: 6.6                 |                                | dpm/100cm <sup>2</sup>                            |   |      |
|   |                         | S <sub>sc</sub> : 1.89                        |                                |   |   |      |
|   |                         | B <sub>sc</sub> : 0.33                        |                                |   |   |      |
|   |                         | Scan MDCR α: 28.4                             |                                | CPM   |   |      |
|   |                         | Scan MDC α: 19.7                              |                                | dpm/100cm <sup>2</sup>                            |   |      |
|   |                         | L <sub>C</sub> β <sub>r</sub> : 73.7          |                                | CPM   |   |      |
|   |                         | L <sub>D</sub> β <sub>r</sub> : 150.0         |                                | CPM   |   |      |
|   |                         | Direct Measurement MDC β <sub>r</sub> : 588.4 |                                | dpm/100cm <sup>2</sup>                            |   |      |
|   |                         | S <sub>β<sub>r</sub></sub> : 26.78            |                                |   |   |      |
|   |                         | B <sub>β<sub>r</sub></sub> : 66.67            |                                |   |   |      |
|   |                         | Scan MDCR β <sub>r</sub> : 402                |                                | CPM   |   |      |
|   |                         | Scan MDC β <sub>r</sub> : 2227.9              |                                | dpm/100cm <sup>2</sup>                            |   |      |
| Survey Data Location  | Scan Survey Results CPM | Scan Survey Results DPM/100cm <sup>2</sup>    | Direct Measurement Reading CPM | Direct Measurement Reading DPM/100cm <sup>2</sup> | DCGL <sub>w</sub> - Data DPM/100cm <sup>2</sup> | Sign |
| D-4   | 5                       | 6.25  | 6                              | 9.38  | 91  | 1    |
| E-4   | 9                       | 18.75   | 10                             | 21.88   | 78  | 1    |
| D-5   | 9                       | 18.75   | 11                             | 25.00   | 75  | 1    |
| E-5   | 9                       | 18.75   | 10                             | 21.88   | 78  | 1    |
| D-6   | 5                       | 6.25  | 8                              | 15.63   | 84  | 1    |
| E-6   | 8                       | 15.63   | 10                             | 21.88   | 78  | 1    |
| D-7   | 5                       | 6.25  | 6                              | 9.38  | 91  | 1    |
| E-7   | 7                       | 12.50   | 8                              | 15.63   | 84  | 1    |
| D-8   | 3                       | 0.00  | 6                              | 9.38  | 91  | 1    |
| E-8   | 10                      | 21.88   | 10                             | 21.88   | 78  | 1    |
| Remarks:  |                         | Critical Value: 10                            |                                | Number of positive differences S+ = 10            |   |      |
|   |                         | Standard Deviation = 6.12                     |                                | Number of Required Data Points: 14                |   |      |
|   |                         | Mean Value = 17.19                            |                                | Sign P: 1.0                                       |   |      |
|   |                         | Median = 18.75                                |                                | LBGR: 50  |   |      |
|   |                         |   |                                | Δσ: 8.17  |   |      |

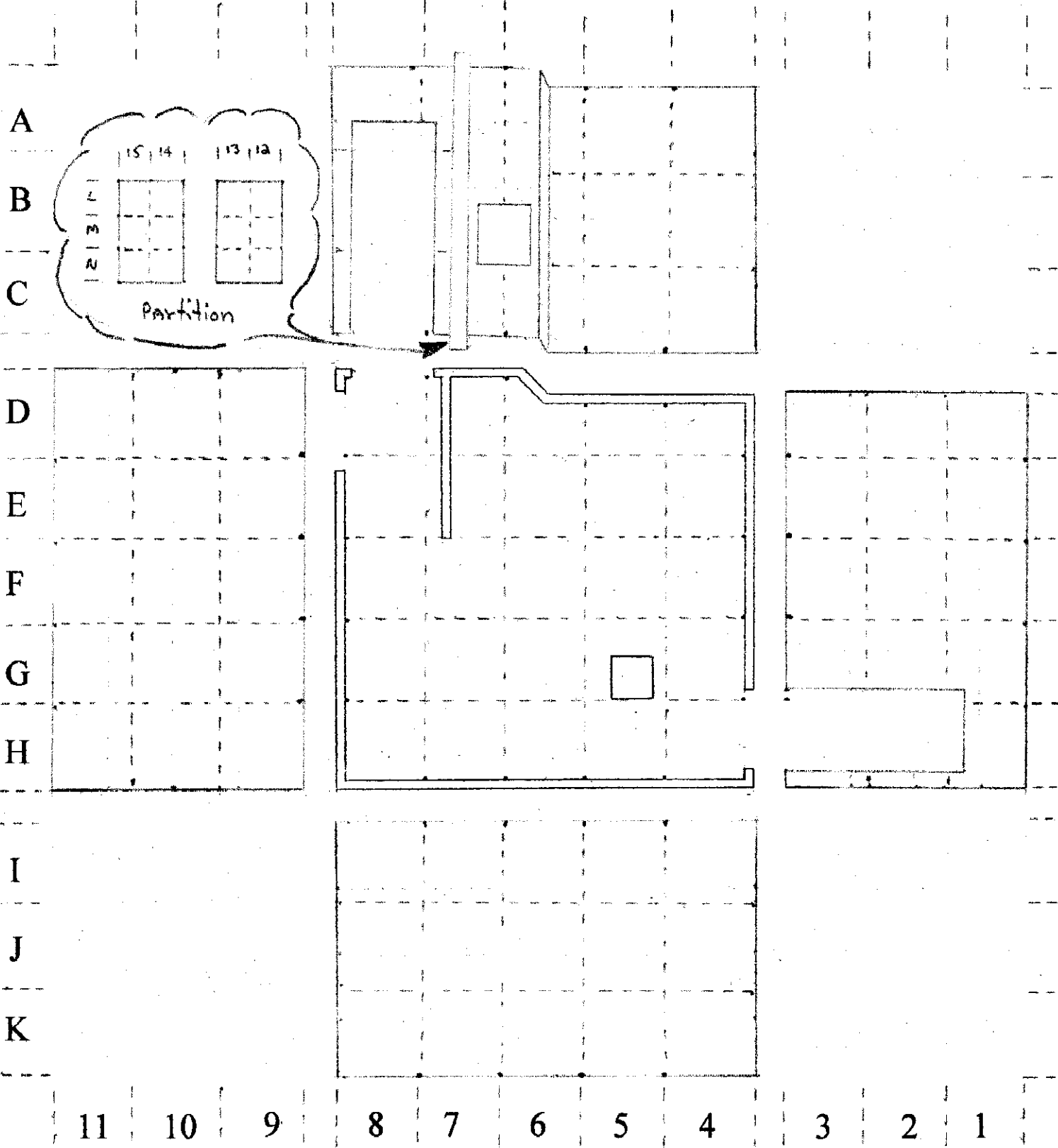
RADIOLOGICAL SURVEY  
SIGN TEST FORM

| Survey Location: Walter Reed AIR   |                         | Instrument: Model 2224                     |                                | DCGL <sub>w</sub> dpm/100cm <sup>2</sup> : 1,500   |   |      |
|--|-------------------------|--|--------------------------------|--|---|------|
| Survey Unit: Room 04   |                         | SN: 143048                                 |                                | Minutes<br>Minutes<br>CPM<br>CPM<br>CPM<br>CPM<br>dpm/100cm <sup>2</sup><br>CPM<br>dpm/100cm <sup>2</sup><br>CPM<br>CPM<br>dpm/100cm <sup>2</sup><br>CPM<br>dpm/100cm <sup>2</sup> |   |      |
| Survey Unit Classification: Class 3  |                         | Detector: Model 43-68                      |                                |  |   |      |
| Survey Unit Size in Meters <sup>2</sup> : 62                                 |                         | SN: 147960                                 |                                |  |   |      |
| Date: 08/14/2000   |                         | Det Size in cm <sup>2</sup> : 125          |                                |  |   |      |
| Time: 0800   |                         | Cal Due Date: 06/03/2001                   |                                |  |   |      |
| Surveyor: Gary Nason, Nancy Morey  |                         | Bkg Time: 1                                |                                |  |   |      |
| Reviewed by: Dan Spicuzza  |                         | Sample Count Time: 1                       |                                |  |   |      |
| Type of Survey: Beta-Gamma Scan and Direct Measurement Survey of Walls       |                         | Surface Efficiency: 0.8                    |                                |  |   |      |
|  |                         | Surveyor Efficiency Factor: 0.5            |                                |  |   |      |
|  |                         | Daily Bkg α: 5                             |                                |  |   |      |
|  |                         | Daily Bkg βγ: 150                          |                                |  |   |      |
|  |                         | Efficiency α: 0.09                         |                                |  |   |      |
|  |                         | Efficiency βγ: 0.12                        |                                |  |   |      |
|  |                         | L <sub>C</sub> α: 5.2                      |                                |  |   |      |
|  |                         | L <sub>D</sub> α: 13.4                     |                                |  |   |      |
|  |                         | Direct Measurement MDC α: 148.9            |                                |  |   |      |
|  |                         | S <sub>in</sub> : 1.89                     |                                |  |   |      |
|  |                         | B <sub>in</sub> : 0.33                     |                                |  |   |      |
|  |                         | Scan MDCR α: 28.4                          |                                |  |   |      |
|  |                         | Scan MDC α: 446.4                          |                                |  |   |      |
|  |                         | L <sub>C</sub> βγ: 28.5                    |                                |  |   |      |
|  |                         | L <sub>D</sub> βγ: 60.0                    |                                |  |   |      |
|  |                         | Direct Measurement MDC βγ: 499.6           |                                |  |   |      |
|  |                         | S <sub>βγ</sub> : 10.37                    |                                |  |   |      |
|  |                         | B <sub>βγ</sub> : 10.00                    |                                |  |   |      |
|  |                         | Scan MDCR βγ: 156                          |                                |  |   |      |
|  |                         | Scan MDC βγ: 1833.6                        |                                |  |   |      |
| Survey Data Location   | Scan Survey Results CPM | Scan Survey Results DPM/100cm <sup>2</sup> | Direct Measurement Reading CPM | Direct Measurement Reading DPM/100cm <sup>2</sup>  | DCGL <sub>w</sub> - Data DPM/100cm <sup>2</sup> | Sign |
| A-8  | 205                     | 366.67                                     | 201                            | 340.00   | 1,160   | 1    |
| B-8  | 200                     | 333.33                                     | 189                            | 260.00   | 1,240   | 1    |
| C-8  | 210                     | 400.00                                     | 198                            | 320.00   | 1,180   | 1    |
| A-7  | 190                     | 266.67                                     | 199                            | 326.67   | 1,173   | 1    |
| B-7  | 180                     | 200.00                                     | 187                            | 246.67   | 1,253   | 1    |
| C-7  | 190                     | 266.67                                     | 188                            | 253.33   | 1,247   | 1    |
| A-6  | 210                     | 400.00                                     | 200                            | 333.33   | 1,167   | 1    |
| B-6  | 230                     | 533.33                                     | 232                            | 546.67   | 953   | 1    |
| C-6  | 210                     | 400.00                                     | 195                            | 300.00   | 1,200   | 1    |
| A-5  | 220                     | 466.67                                     | 210                            | 400.00   | 1,100   | 1    |
| B-5  | 220                     | 466.67                                     | 218                            | 453.33   | 1,047   | 1    |
| C-5  | 220                     | 466.67                                     | 210                            | 400.00   | 1,100   | 1    |
| A-4  | 210                     | 400.00                                     | 212                            | 413.33   | 1,087   | 1    |
| B-4  | 220                     | 466.67                                     | 211                            | 406.67   | 1,093   | 1    |
| C-4  | 220                     | 466.67                                     | 220                            | 466.67   | 1,033   | 1    |
| D-3  | 190                     | 266.67                                     | 195                            | 300.00   | 1,200   | 1    |
| E-3  | 190                     | 266.67                                     | 186                            | 240.00   | 1,260   | 1    |
| D-2  | 210                     | 400.00                                     | 206                            | 373.33   | 1,127   | 1    |
| E-2  | 210                     | 400.00                                     | 208                            | 386.67   | 1,113   | 1    |
| D-1  | 220                     | 466.67                                     | 222                            | 480.00   | 1,020   | 1    |
| E-1  | 190                     | 266.67                                     | 198                            | 320.00   | 1,180   | 1    |
| F-8  | 190                     | 266.67                                     | 204                            | 360.00   | 1,140   | 1    |
| G-8  | 180                     | 200.00                                     | 201                            | 340.00   | 1,160   | 1    |
| H-8  | 200                     | 333.33                                     | 202                            | 346.67   | 1,153   | 1    |
| F-7  | 190                     | 266.67                                     | 208                            | 386.67   | 1,113   | 1    |
| G-7  | 190                     | 266.67                                     | 198                            | 320.00   | 1,180   | 1    |
| H-7  | 200                     | 333.33                                     | 209                            | 393.33   | 1,107   | 1    |
| F-6  | 190                     | 266.67                                     | 196                            | 306.67   | 1,193   | 1    |
| G-6  | 180                     | 200.00                                     | 190                            | 266.67   | 1,233   | 1    |
| H-6  | 200                     | 333.33                                     | 203                            | 353.33   | 1,147   | 1    |
| F-5  | 190                     | 266.67                                     | 191                            | 273.33   | 1,227   | 1    |
| G-5  | 190                     | 266.67                                     | 194                            | 293.33   | 1,207   | 1    |
| H-5  | 200                     | 333.33                                     | 203                            | 353.33   | 1,147   | 1    |
| F-4  | 190                     | 266.67                                     | 194                            | 293.33   | 1,207   | 1    |
| G-4  | 200                     | 333.33                                     | 192                            | 280.00   | 1,220   | 1    |
| H-4  | 210                     | 400.00                                     | 216                            | 440.00   | 1,060   | 1    |
| D-9  | 210                     | 400.00                                     | 212                            | 413.33   | 1,087   | 1    |
| E-9  | 200                     | 333.33                                     | 207                            | 380.00   | 1,120   | 1    |
| D-10   | 190                     | 266.67                                     | 194                            | 293.33   | 1,207   | 1    |
| E-10   | 190                     | 266.67                                     | 198                            | 320.00   | 1,180   | 1    |
| D-11   | 200                     | 333.33                                     | 205                            | 366.67   | 1,133   | 1    |
| E-11   | 200                     | 333.33                                     | 207                            | 380.00   | 1,120   | 1    |
| Remarks: Micro/hr readings at 1 meter from surfaces of all grids is 4 μR/hr. |                         | Critical Value: 10                         |                                | Number of positive differences S+ = 42   |   |      |
| Model 19 S/N:133178  |                         | Standard Deviation = 68.18                 |                                | Number of Required Date Points: 14   |   |      |
|  |                         | Mean Value = 350.63                        |                                | Sign P: 1.0  |   |      |
|  |                         | Median = 343.33                            |                                | LBGR: 750  |   |      |
|  |                         |  |                                | Δ/σ: 11  |   |      |

# Appendix M

## Room 02-03 Final Status Survey Data

# Room 02-03 Grid Map



Grids are 1 Meter by 1 Meter

RADIOLOGICAL SURVEY  
SIGN TEST FORM

| Survey Location:   | Walter Reed AIR  |  | Instrument:                    | Model 2224  |   |       |
|--|--|--|--------------------------------|---|---|-------|
| Survey Unit:   | Room 02-03   |  | SN:                            | 143040  | DCGL <sub>w</sub> dpm/100cm <sup>2</sup> :      | 1,500 |
| Survey Unit Classification:  | Class 2  |  | Detector:                      | Model 43-37                                       |   |       |
| Survey Unit Size in Meters <sup>2</sup> :                                    | 97   |  | SN:                            | 128623  |   |       |
| Date:  | 08/15/2000   |  | Det Size in cm <sup>2</sup> :  | 425   |   |       |
| Time:  | 0800   |  | Cal Due Date:                  | 06/03/2001  |   |       |
| Surveyor:  | Gary Nason, Nancy Morey                                |  | Bkg Time:                      | 1   | Minutes   |       |
| Reviewed by:   | Dan Spicuzza   |  | Sample Count Time:             | 1   | Minutes   |       |
| Type of Survey:  | Beta-Gamma Scan and Direct Measurement Survey of Floor |  | Surface Efficiency:            | 0.8   |   |       |
|  |  |  | Surveyor Efficiency Factor:    | 0.5   |   |       |
|  |  |  | Daily Bkg α:                   | 4   | CPM   |       |
|  |  |  | Daily Bkg βγ:                  | 1000  | CPM   |       |
|  |  |  | Efficiency α:                  | 0.8   |   |       |
|  |  |  | Efficiency βγ:                 | 0.1   |   |       |
|  |  |  | L <sub>C</sub> α:              | 4.7   | CPM   |       |
|  |  |  | L <sub>D</sub> α:              | 12.3  | CPM   |       |
|  |  |  | Direct Measurement MDC α:      | 4.5   | dpm/100cm <sup>2</sup>                          |       |
|  |  |  | S <sub>int</sub> :             | 1.69  |   |       |
|  |  |  | B <sub>int</sub> :             | 0.27  |   |       |
|  |  |  | Scan MDCR α:                   | 25.4  | CPM   |       |
|  |  |  | Scan MDC βγ:                   | 13.2  | dpm/100cm <sup>2</sup>                          |       |
|  |  |  | L <sub>C</sub> βγ:             | 73.7  | CPM   |       |
|  |  |  | L <sub>D</sub> βγ:             | 150.0   | CPM   |       |
|  |  |  | Direct Measurement MDC βγ:     | 441.3   | dpm/100cm <sup>2</sup>                          |       |
|  |  |  | S <sub>βγ</sub> :              | 26.78   |   |       |
|  |  |  | B <sub>βγ</sub> :              | 66.67   |   |       |
|  |  |  | Scan MDCR βγ:                  | 402   | CPM   |       |
|  |  |  | Scan MDC βγ:                   | 1670.9  | dpm/100cm <sup>2</sup>                          |       |
| Survey Data Location   | Scan Survey Results CPM                                | Scan Survey Results DPM/100cm <sup>2</sup> | Direct Measurement Reading CPM | Direct Measurement Reading DPM/100cm <sup>2</sup> | DCGL <sub>w</sub> - Data DPM/100cm <sup>2</sup> | Sign  |
| D-8  | 1600   | 1500.00                                    | 1684                           | 1710.00   | -210  | -1    |
| E-8  | 1100   | 250.00                                     | 1120                           | 300.00  | 1,200   | 1     |
| F-8  | 1100   | 250.00                                     | 1170                           | 425.00  | 1,075   | 1     |
| G-8  | 1100   | 250.00                                     | 1190                           | 475.00  | 1,025   | 1     |
| H-8  | 1100   | 250.00                                     | 1220                           | 550.00  | 950   | 1     |
| D-7  | 1100   | 250.00                                     | 1212                           | 530.00  | 970   | 1     |
| E-7  | 1000   | 0.00                                       | 1130                           | 325.00  | 1,175   | 1     |
| F-7  | 1000   | 0.00                                       | 1165                           | 412.50  | 1,088   | 1     |
| G-7  | 1000   | 0.00                                       | 1142                           | 355.00  | 1,145   | 1     |
| H-7  | 1000   | 0.00                                       | 1155                           | 387.50  | 1,113   | 1     |
| D-6  | 1100   | 250.00                                     | 1118                           | 295.00  | 1,205   | 1     |
| E-6  | 1100   | 250.00                                     | 1109                           | 272.50  | 1,228   | 1     |
| F-6  | 1000   | 0.00                                       | 1070                           | 175.00  | 1,325   | 1     |
| G-6  | 1000   | 0.00                                       | 1020                           | 50.00   | 1,450   | 1     |
| H-6  | 1100   | 250.00                                     | 1106                           | 265.00  | 1,235   | 1     |
| D-5  | 1000   | 0.00                                       | 1020                           | 50.00   | 1,450   | 1     |
| E-5  | 1000   | 0.00                                       | 1085                           | 212.50  | 1,288   | 1     |
| F-5  | 1000   | 0.00                                       | 1070                           | 175.00  | 1,325   | 1     |
| G-5  | 1000   | 0.00                                       | 1020                           | 50.00   | 1,450   | 1     |
| H-5  | 1100   | 250.00                                     | 1101                           | 252.50  | 1,248   | 1     |
| D-4  | 1000   | 0.00                                       | 1065                           | 162.50  | 1,338   | 1     |
| E-4  | 1000   | 0.00                                       | 1032                           | 80.00   | 1,420   | 1     |
| F-4  | 1000   | 0.00                                       | 1042                           | 105.00  | 1,395   | 1     |
| G-4  | 1100   | 250.00                                     | 1098                           | 245.00  | 1,255   | 1     |
| H-4  | 1100   | 250.00                                     | 1110                           | 275.00  | 1,225   | 1     |
| Remarks: Micro/hr readings at 1 meter from surfaces of all grids is 4 µR/hr. |  | Critical Value =                           | 11                             | Number of positive differences S+ =               | 24  |       |
| Model 19 S/N:133178  |  | Standard Deviation =                       | 322.57                         | Number of Required Date Points:                   | 15  |       |
| Grids are 1 m by 1 m   |  | Mean Value =                               | 325.40                         | Sign P:   | 0.993970  |       |
|  |  | Median =                                   | 272.5                          | LBGR:   | 750   |       |
|  |  |  |                                | Δσ:   | 2.32  |       |



RADIOLOGICAL SURVEY  
SIGN TEST FORM

| Survey Location:                          | Walter Reed AIR  |  | Instrument:                    | Model 2224  |   |       |
|---|--|--|--------------------------------|---|---|-------|
| Survey Unit:                              | Room 02-03   |  | SN:                            | 143048  | DCGL <sub>w</sub> dpm/100cm <sup>2</sup> :      | 1,500 |
| Survey Unit Classification:               | Class 2  |  | Detector:                      | Model 43-37                                       |   |       |
| Survey Unit Size in Meters <sup>2</sup> : | 97   |  | SN:                            | 147960  |   |       |
| Date:                                     | 08/15/2000   |  | Det Size in cm <sup>2</sup> :  | 125   |   |       |
| Time:                                     | 1430   |  | Cal Due Date:                  | 06/03/2001  |   |       |
| Surveyor:                                 | Gary Nason, Nancy Morey                                |  | Bkg Time:                      | 1   | Minutes   |       |
| Reviewed by:                              | Dan Spicuzza   |  | Sample Count Time:             | 1   | Minutes   |       |
| Type of Survey:                           | Beta-Gamma Scan and Direct Measurement Survey of Walls |  | Surface Efficiency:            | 0.8   |   |       |
|   |  |  | Surveyor Efficiency Factor:    | 0.5   |   |       |
|   |  |  | Daily Bkg α:                   | 4   | CPM   |       |
|   |  |  | Daily Bkg βγ:                  | 150   | CPM   |       |
|   |  |  | Efficiency α:                  | 0.8   |   |       |
|   |  |  | Efficiency βγ:                 | 0.12  |   |       |
|   |  |  | L <sub>C</sub> α:              | 4.7   | CPM   |       |
|   |  |  | L <sub>D</sub> α:              | 12.3  | CPM   |       |
|   |  |  | Direct Measurement MDC α:      | 15.4  | dpm/100cm <sup>2</sup>                          |       |
|   |  |  | S <sub>α</sub> :               | 1.69  |   |       |
|   |  |  | B <sub>α</sub> :               | 0.27  |   |       |
|   |  |  | Scan MDCR α:                   | 25.4  | CPM   |       |
|   |  |  | Scan MDC α:                    | 44.9  | dpm/100cm <sup>2</sup>                          |       |
|   |  |  | L <sub>C</sub> βγ:             | 28.5  | CPM   |       |
|   |  |  | L <sub>D</sub> βγ:             | 60.0  | CPM   |       |
|   |  |  | Direct Measurement MDC βγ:     | 499.6   | dpm/100cm <sup>2</sup>                          |       |
|   |  |  | S <sub>βγ</sub> :              | 10.37   |   |       |
|   |  |  | B <sub>βγ</sub> :              | 10.00   |   |       |
|   |  |  | Scan MDCR βγ:                  | 156   | CPM   |       |
|   |  |  | Scan MDC βγ:                   | 1833.6  | dpm/100cm <sup>2</sup>                          |       |
| Survey Data Location                      | Scan Survey Results CPM                                | Scan Survey Results DPM/100cm <sup>2</sup> | Direct Measurement Reading CPM | Direct Measurement Reading DPM/100cm <sup>2</sup> | DCGL <sub>w</sub> - Data DPM/100cm <sup>2</sup> | Sign  |
| D-1                                       | 180  | 75.00                                      | 185                            | 87.50   | 1,413   | 1     |
| E-1                                       | 170  | 50.00                                      | 174                            | 60.00   | 1,440   | 1     |
| F-1                                       | 180  | 75.00                                      | 183                            | 82.50   | 1,418   | 1     |
| G-1                                       | 170  | 50.00                                      | 162                            | 30.00   | 1,470   | 1     |
| H-1                                       | 170  | 50.00                                      | 172                            | 55.00   | 1,445   | 1     |
| D-2                                       | 200  | 125.00                                     | 215                            | 162.50  | 1,338   | 1     |
| E-2                                       | 210  | 150.00                                     | 212                            | 155.00  | 1,345   | 1     |
| F-2                                       | 200  | 125.00                                     | 201                            | 127.50  | 1,373   | 1     |
| G-2                                       | 190  | 100.00                                     | 192                            | 105.00  | 1,395   | 1     |
| H-2                                       | 180  | 75.00                                      | 183                            | 82.50   | 1,418   | 1     |
| D-3                                       | 200  | 125.00                                     | 202                            | 130.00  | 1,370   | 1     |
| E-3                                       | 190  | 100.00                                     | 193                            | 107.50  | 1,393   | 1     |
| F-3                                       | 200  | 125.00                                     | 205                            | 137.50  | 1,363   | 1     |
| G-3                                       | 190  | 100.00                                     | 179                            | 72.50   | 1,428   | 1     |
| H-3                                       | 180  | 75.00                                      | 184                            | 85.00   | 1,415   | 1     |
| A-4                                       | 200  | 125.00                                     | 209                            | 147.50  | 1,353   | 1     |
| B-4                                       | 180  | 75.00                                      | 187                            | 92.50   | 1,408   | 1     |
| C-4                                       | 190  | 100.00                                     | 189                            | 97.50   | 1,403   | 1     |
| I-4                                       | 190  | 100.00                                     | 191                            | 102.50  | 1,398   | 1     |
| J-4                                       | 210  | 150.00                                     | 219                            | 172.50  | 1,328   | 1     |
| K-4                                       | 200  | 125.00                                     | 206                            | 140.00  | 1,360   | 1     |
| A-5                                       | 200  | 125.00                                     | 202                            | 130.00  | 1,370   | 1     |
| B-5                                       | 190  | 100.00                                     | 293                            | 357.50  | 1,143   | 1     |
| C-5                                       | 200  | 125.00                                     | 204                            | 135.00  | 1,365   | 1     |
| I-5                                       | 190  | 100.00                                     | 191                            | 102.50  | 1,398   | 1     |
| J-5                                       | 180  | 75.00                                      | 187                            | 92.50   | 1,408   | 1     |
| K-5                                       | 200  | 125.00                                     | 207                            | 142.50  | 1,358   | 1     |
| A-6                                       | 200  | 125.00                                     | 206                            | 140.00  | 1,360   | 1     |
| B-6                                       | 180  | 75.00                                      | 189                            | 97.50   | 1,403   | 1     |
| C-6                                       | 200  | 125.00                                     | 219                            | 172.50  | 1,328   | 1     |
| I-6                                       | 180  | 75.00                                      | 188                            | 95.00   | 1,405   | 1     |
| J-6                                       | 190  | 100.00                                     | 198                            | 120.00  | 1,380   | 1     |
| K-6                                       | 180  | 75.00                                      | 199                            | 122.50  | 1,378   | 1     |
| A-7                                       | 200  | 125.00                                     | 209                            | 147.50  | 1,353   | 1     |
| B-7                                       | 190  | 100.00                                     | 199                            | 122.50  | 1,378   | 1     |
| C-7                                       | 180  | 75.00                                      | 183                            | 82.50   | 1,418   | 1     |
| I-7                                       | 190  | 100.00                                     | 201                            | 127.50  | 1,373   | 1     |
| J-7                                       | 190  | 100.00                                     | 211                            | 152.50  | 1,348   | 1     |
| K-7                                       | 200  | 125.00                                     | 206                            | 140.00  | 1,360   | 1     |
| A-8                                       | 200  | 125.00                                     | 208                            | 145.00  | 1,355   | 1     |
| B-8                                       | 200  | 125.00                                     | 218                            | 170.00  | 1,330   | 1     |
| C-8                                       | 190  | 100.00                                     | 193                            | 107.50  | 1,393   | 1     |
| I-8                                       | 200  | 125.00                                     | 208                            | 145.00  | 1,355   | 1     |
| J-8                                       | 200  | 125.00                                     | 201                            | 127.50  | 1,373   | 1     |



RADIOLOGICAL SURVEY  
SIGN TEST FORM

|  |  |        |                               |             |  |       |
|--|--|--------|-------------------------------|-------------|--|-------|
| Survey Location:   | Walter Reed AIR  |        | Instrument:                   | Model 2224  |  |       |
| Survey Unit:   | Room 02-03   |        | SN:                           | 143048      | DCGL <sub>w</sub> dpm/100cm <sup>2</sup> : |       |
| Survey Unit Classification:  | Class 2  |        | Detector:                     | Model 43-37 | 1,500                                      |       |
| Survey Unit Size in Meters <sup>2</sup> :                                    | 97   |        | SN:                           | 147960      |  |       |
| Date:  | 08/15/2000   |        | Det Size in cm <sup>2</sup> : | 125         |  |       |
| Time:  | 1430   |        | Cal Due Date:                 | 06/03/2001  |  |       |
| Surveyor:  | Gary Nason, Nancy Morey                                |        | Bkg Time:                     | 1           | Minutes                                    |       |
| Reviewed by:   | Dan Spicuzza   |        | Sample Count Time:            | 1           | Minutes                                    |       |
| Type of Survey:  | Beta-Gamma Scan and Direct Measurement Survey of Walls |        | Surface Efficiency:           | 0.8         |  |       |
|  |  |        | Surveyor Efficiency Factor:   | 0.5         |  |       |
|  |  |        | Daily Bkg α:                  | 4           | CPM  |       |
|  |  |        | Daily Bkg βγ:                 | 150         | CPM  |       |
|  |  |        | Efficiency α:                 | 0.8         |  |       |
|  |  |        | Efficiency βγ:                | 0.12        |  |       |
|  |  |        | L <sub>C</sub> α:             | 4.7         | CPM  |       |
|  |  |        | L <sub>D</sub> α:             | 12.3        | CPM  |       |
|  |  |        | Direct Measurement MDC α:     | 15.4        | dpm/100cm <sup>2</sup>                     |       |
|  |  |        | S <sub>α</sub> :              | 1.69        |  |       |
|  |  |        | B <sub>α</sub> :              | 0.27        |  |       |
|  |  |        | Scan MDCR α:                  | 25.4        | CPM  |       |
|  |  |        | Scan MDC α:                   | 44.9        | dpm/100cm <sup>2</sup>                     |       |
|  |  |        | L <sub>C</sub> βγ:            | 28.5        | CPM  |       |
|  |  |        | L <sub>D</sub> βγ:            | 60.0        | CPM  |       |
|  |  |        | Direct Measurement MDC βγ:    | 499.6       | dpm/100cm <sup>2</sup>                     |       |
|  |  |        | S <sub>βγ</sub> :             | 10.37       |  |       |
|  |  |        | B <sub>βγ</sub> :             | 10.00       |  |       |
|  |  |        | Scan MDCR βγ:                 | 156         | CPM  |       |
|  |  |        | Scan MDC βγ:                  | 1833.6      | dpm/100cm <sup>2</sup>                     |       |
| K-8  | 200  | 125.00 | 208                           | 145.00      | 1,355                                      | 1     |
| D-9  | 200  | 125.00 | 203                           | 132.50      | 1,368                                      | 1     |
| E-9  | 210  | 150.00 | 208                           | 145.00      | 1,355                                      | 1     |
| F-9  | 210  | 150.00 | 202                           | 130.00      | 1,370                                      | 1     |
| G-9  | 210  | 150.00 | 212                           | 155.00      | 1,345                                      | 1     |
| H-9  | 200  | 125.00 | 207                           | 142.50      | 1,358                                      | 1     |
| D-10   | 220  | 175.00 | 227                           | 192.50      | 1,308                                      | 1     |
| E-10   | 200  | 125.00 | 204                           | 135.00      | 1,365                                      | 1     |
| F-10   | 210  | 150.00 | 208                           | 145.00      | 1,355                                      | 1     |
| G-10   | 240  | 225.00 | 248                           | 245.00      | 1,255                                      | 1     |
| H-10   | 200  | 125.00 | 198                           | 120.00      | 1,380                                      | 1     |
| D-11   | 240  | 225.00 | 257                           | 267.50      | 1,233                                      | 1     |
| E-11   | 210  | 150.00 | 209                           | 147.50      | 1,353                                      | 1     |
| F-11   | 220  | 175.00 | 232                           | 205.00      | 1,295                                      | 1     |
| G-11   | 220  | 175.00 | 234                           | 210.00      | 1,290                                      | 1     |
| H-11   | 210  | 150.00 | 212                           | 155.00      | 1,345                                      | 1     |
| L-12   | 250  | 250.00 | 255                           | 262.50      | 1,238                                      | 1     |
| M-12   | 240  | 225.00 | 246                           | 240.00      | 1,260                                      | 1     |
| N-12   | 230  | 200.00 | 234                           | 210.00      | 1,290                                      | 1     |
| L-13   | 230  | 200.00 | 231                           | 202.50      | 1,298                                      | 1     |
| M-13   | 200  | 125.00 | 203                           | 132.50      | 1,368                                      | 1     |
| N-13   | 200  | 125.00 | 208                           | 145.00      | 1,355                                      | 1     |
| L-14   | 230  | 200.00 | 235                           | 212.50      | 1,288                                      | 1     |
| M-14   | 210  | 150.00 | 214                           | 160.00      | 1,340                                      | 1     |
| N-14   | 210  | 150.00 | 211                           | 152.50      | 1,348                                      | 1     |
| L-15   | 230  | 200.00 | 242                           | 230.00      | 1,270                                      | 1     |
| M-15   | 240  | 225.00 | 248                           | 245.00      | 1,255                                      | 1     |
| N-15   | 230  | 200.00 | 226                           | 190.00      | 1,310                                      | 1     |
| Remarks: Micro/hr readings at 1 meter from surfaces of all grids is 4 μR/hr. |  |        | Critical Value:               | 10          | Number of positive differences S+ =        | 72    |
| Model 19 S/N:133178  |  |        | Standard Deviation =          | 55.03       | Number of Required Date Points:            | 14    |
| Grids are 1 m by 1 m   |  |        | Mean Value =                  | 145.31      | Sign P:                                    | 1.0   |
|  |  |        | Median =                      | 140         | LBGR:                                      | 750   |
|  |  |        |                               |             | Δσ:  | 13.62 |