

## Survey Meter Readings at Rongelap Atoll

August, 1958

Rongelap Island

Values expressed in millireps per hour\*

| Sta.<br>No.   | Area or locality   | Shield: | 3' above ground |             | 1" above ground |             |
|---|--|---------|-----------------|-------------|-----------------|-------------|
|   |  |         | <u>closed</u>   | <u>open</u> | <u>closed</u>   | <u>open</u> |
| <u>Southwest edge of village<br/>near road, August 24, 1958</u> |  |         |                 |             |                 |             |
| 1   | Under isolated <u>Morinda</u> in<br>cleared area of coconut<br>trees 300' SE of house with<br>red water drum   |         | .07<br>.05      | .10<br>.12  | .07<br>.08      | .12<br>.22  |
| 2   | Open area over sedge   |         | .07<br>.05      | .10<br>.15  | .08<br>.05      | .14<br>.2   |
| 3   | Under coconut trees, 6'<br>from road, 500' S of red<br>drum, opposite new house<br>built by Rongelapese  |         | .06<br>.05      | .10<br>.12  | .09<br>.05      | .15<br>.20  |
| 4   | Open area over grass<br>( <u>Lepturus</u> )  |         | .07<br>.05      | .09<br>.10  | .07<br>.05      | .09<br>.12  |
| 5   | Under <u>Pandanus</u> over dead<br>leaves  |         | .09<br>.07      | .09<br>.07  | .08<br>.05      | .15<br>.20  |
| <u>Southwest edge of village,<br/>seaward side</u>              |  |         |                 |             |                 |             |
| 6   | Walked road to ocean side.<br>To right of road above high<br>tide line at seaward reef<br>between coconut trees and<br><u>Scaevola</u> over broken coral |         | .04<br>.03      | .06<br>.06  | .04<br>.04      | .09<br>.06  |
| 7   | At high tide line, seaward<br>reef   |         | .02<br>.02      | .02<br>.02  | .02<br>.02      | .03<br>.02  |
| 8   | Intertidal zone, seaward reef  |         | .02<br>.02      | .02<br>.02  | .02<br>.03      | .02<br>.03  |
| <u>North edge of village</u>                                    |  |         |                 |             |                 |             |
| 9   | Vicinity of soil profile #1<br>Under coconut trees   |         | .07<br>.04      | .10<br>.07  | .08<br>.08      | .15<br>.15  |

\*First reading with PDR 27 #153  
Second reading with FCDA

Rongelap Island (continued)

| Sta. No. | Area or locality                       | Shield: | 3' above ground |      | 1" above ground |      |
|----------|--|---------|-----------------|------|-----------------|------|
|          |  |         | closed          | open | closed          | open |
| 10       | Open area, grass                       |         | .07             | .11  | .08             | .13  |
|          |  |         | .03             | .10  | .05             | .25  |
| 11       | Area of soil profile #1 within 10 feet |         | .06             | .11  | .08             | .14  |
|          |  |         | .02             | .10  | .05             | .12  |
| 12       | Under <u>Pandanus</u>                  |         | .07             | .12  | .07             | .17  |
|          |  |         | .06             | .18  | .08             | .22  |
| 13       | Under <u>Messerschmidia</u>            |         | .06             | .07  | .07             | .10  |
|          |  |         | .03             | .05  | .08             | .10  |

3.1 miles west of Magistrate John's house

|   |     |     |     |     |
|---|-----|-----|-----|-----|
| In coconut grove 25' south of road (across road from the cemetery) Grass now 1'-2' high, lush green | .08 | .11 | .09 | .17 |
|   | .06 | .12 | .07 | .18 |
| In coconut grove 100' south of road   | .06 | .14 | .07 | .16 |
|   | .08 | .11 | .10 | .15 |
|   | .07 | .15 | .08 | .24 |
|   | .08 | .10 | .06 | .22 |

West end of island about 0.1 miles east of road end; 3.6 miles from John's

|  |      |      |      |      |
|--|------|------|------|------|
| 15' south of road over open area   | .06  | .12  | .2   | .07  |
|  | .06  | .14  | .3   | .04  |
|  | .06  | .15  | .27  | .05  |
| 10' north of road over <u>Scaevola</u>                                     | .04  | .07  | .09  | .15  |
|  | .06  | .10  | .05  | .11  |
|  | .06  | .09  | .10  | .14  |
| 60' north of road over sand and <u>Wedalia</u> vines, and <u>Boerhavia</u> | .08  | .10  | .09  | .13  |
|  | .05  | .12  | .06  | .18  |
|  | .07  | .10  | .05  | .2   |
| Average of first reading   | .062 | .089 | .079 | .119 |
| Average of second reading  | .046 | .099 | .071 | .141 |
| Average of third reading   | .067 | .116 | .11  | .154 |

Kabelle Island  
August 20, 1958

| Sta.<br>No.  | Area or locality  | Shield: | 3' above ground |            | 1' above ground |             |
|--|---|---------|-----------------|------------|-----------------|-------------|
|  |   |         | closed          | open       | closed          | open        |
| <u>Center of Island</u>  |   |         |                 |            |                 |             |
| 1  | Lysimeter station under<br><u>Pisonia</u>   |         | .17<br>.14      | .27<br>.55 | .21<br>.21      | .40<br>1.2  |
| 2  | Lysimeter station under<br><u>Pisonia</u>   |         | .19<br>.16      | .23<br>.27 | .21<br>.18      | .32<br>.38  |
| 3  | Under <u>Pisonia</u> , over guano on<br><u>Boerhavia</u> (Guano no hotter<br>than ground)   |         | .19<br>.19      | .30<br>.37 | .19<br>.18      | .36<br>.60  |
| <u>Proceeding from lagoon shore toward<br/>seaward shore across center of<br/>island</u> |   |         |                 |            |                 |             |
| 4  | Just above high tide, lagoon<br>side  |         | .18<br>.13      | .23<br>.32 | .20<br>.19      | .30<br>.70  |
| 5  | About 40 yds. from shore,<br>open area  |         | .25<br>.1       | .37<br>.85 | .25<br>.23      | .60<br>1.60 |
| 6  | About 100 yds. from shore,<br><u>Pisonia</u> and coconut trees  |         | .20<br>.15      | .29<br>.55 | .22<br>.16      | .40<br>.70  |
| 7  | About 100 yds. from shore,<br>mound under coconut trees   |         | -               | -          | -               | -           |
| 8  | 200 yds. from shore, 50' north<br>of Lysimeter Station, under<br><u>Pisonia</u>   |         | .20<br>.15      | .25<br>.55 | .24<br>.18      | .40<br>.70  |
| 9  | About 200 yds. from shore,<br>sandy area  |         | .20<br>.14      | .28<br>.42 | .26<br>.13      | .35<br>.95  |
| 10   | About 275 yds. from shore<br>under <u>Scaevola</u> and <u>Guettarda</u> ,<br>sandy area 200-220 yds. along<br>trail from Lysimeter Station        |         | .20<br>.16      | .30<br>.70 | .27<br>.17      | .60<br>1.10 |
| 11   | About 400 yds. from shore,<br><u>Scaevola</u> thicket, over dead<br>leaves. 320 yds. from Lysimeter<br>Station along trail                        |         | .20<br>.16      | .27<br>.65 | .20<br>.19      | .36<br>1.20 |
| 12   | About 400 yds. from shore,<br><u>Scaevola</u> thicket, over sand<br>cover with black lichen or algal<br>growth. 100 yds. from ocean high<br>tide. |         | .17<br>.12      | .26<br>.60 | .22<br>.15      | .45<br>.80  |

Kabelle Island (continued)

| Sta. No. | Area or locality                  | Shield: | 3' above ground |      | 1" above ground |      |
|----------|-----------------------------------|---------|-----------------|------|-----------------|------|
|          |                                   |         | closed          | open | closed          | open |
| 13       | High tide line, over sand         |         | .13             | .15  | .13             | .22  |
|          |                                   |         | .07             | .15  | .13             | .24  |
| 14       | Intertidal beach rock, ocean side |         | .03             | .03  | .03             | .05  |
|          |                                   |         | .04             | .06  | .03             | .05  |
|          | Average of first reading          |         | .178            | .25  | .20             | .37  |
|          | Average of second reading         |         | .137            | .46  | .164            | .79  |

Eniaetok Island

August 18, 1958

| Sta. No.   | Area or locality   | Shield: | 3' above ground |      | 1" above ground |      |
|--|--|---------|-----------------|------|-----------------|------|
|  |  |         | closed          | open | closed          | open |
| <u>Readings taken across center of island at widest portion from lagoon shore to seaward shore</u> |  |         |                 |      |                 |      |
| 1  | Near first house under coconut trees                     |         | .03             | .11  | .12             | .16  |
|  |  |         | .08             | .13  | .09             | .26  |
| 2  | Pile of humus and ashes                                  |         | .10             | .12  | .10             | .16  |
|  |  |         | .08             | .21  | .08             | .16  |
| 3  | Under <u>Pandanus</u> over dead leaves                   |         | .08             | .13  | .10             | .16  |
|  |  |         | .11             | .21  | .07             | .65  |
| 4  | Under coconut trees beside road 100' from water          |         | .08             | .10  | .10             | .12  |
|  |  |         | .07             | .13  | .09             | .34  |
| 5  | Coconut grove N of road about 1/3 way across island      |         | .10             | .17  | .15             | .23  |
|  |  |         | .07             | .12  | .12             | .32  |
| 6  | Pile of coconut husks                                    |         | .10             | .14  | .12             | .16  |
|  |  |         | .08             | .14  | .09             | .17  |
| 7  | Grass and sand. (Sand has moved in, covered most lichen) |         | .08             | .08  | .08             | .09  |
|  |  |         | .06             | .09  | .07             | .09  |
| 8  | Over fresh sand  |         | .07             | .07  | .07             | .06  |
|  |  |         | .05             | .07  | .06             | .09  |
| 9  | Over lichen  |         | .06             | .09  | .07             | .13  |
|  |  |         | .06             | .13  | .07             | .21  |

Eniaetok Island (continued)

| Sta.<br>No.   | Area or locality  | Shield | 3' above ground |      | 1" above ground |      |
|---|---|--------|-----------------|------|-----------------|------|
|   |   |        | closed          | open | closed          | open |
| 10  | At high tide line   |        | .06             | .08  | .07             | .08  |
|   |   |        | .07             | .12  | .07             | .16  |
| 11  | Intertidal zone, beach<br>pavement  |        | .02             | .03  | .015            | .02  |
|   |   |        | .02             | .03  | .03             | .04  |
| Areas<br>in ad-<br>dition<br>to<br>previous<br>stations | Beside road 200 yds. from<br>ship landing under coconut<br>tree, fronds and bare sand |        | .07             | .16  | .55             | .26  |
|   |   |        | .06             | .08  | .05             | .13  |
|   | <u>Scaevola</u> at edge of tidal<br>area, N end of island                             |        | .08             | .08  | .10             | .17  |
|   |   |        | .07             | .14  | .13             | .32  |
|   | Lichen on sand at N end   |        | .08             | .09  | .11             | .38  |
|   |   |        | .07             | .21  | .08             | .55  |
|   | Coconut grove, N end road.<br>Soil, sand and fronds                                   |        | .12             | .16  | .14             | .23  |
|   |   |        | .14             | .25  | .11             | .60  |
|   | Average of first reading  |        | .079            | .107 | .126            | .161 |
|   | Average of second reading   |        | .073            | .137 | .081            | .273 |