

Sept 27, 1982 MT
Calculations

COLUMN WRITE ®

	1	2	3	4	5
	Atoll (1980 population)	Highest dose to individual in 1 year (mrem)	30 year whole body dose (mrem)	30 year bone marrow dose (mrem)	30 year cancer rate 30 year time Birth defects
1	Ujelang (100)	20	130	150	0.002 - 0.01 0.0002 - 0.002
2	Wotho (76)	30	200	230	0.002 - 0.01 0.0002 - 0.003
3	Ailengmae (100*)	230	1800	1800	0.02 - 0.2 0.002 - 0.03
4	Rongelap (233)	400	2500	3400	0.1 - 0.7 0.007 - 0.1
5	Rongerik (100*)	450	1800	3800	0.05 - 0.3 0.002 - 0.03
6	Fikeip (487)	80	560	600	0.04 - 0.3 0.003 - 0.05
7	Taka (100*)	20	140	190	0.002 - 0.02 0.0002 - 0.003
8	Jemo (100*)	60	440	500	0.006 - 0.04 0.0005 - 0.008
9	Utrik (328)	80	530	680	0.03 - 0.2 0.002 - 0.03
10	Bikar (100*)	170	520	690	0.02 - 0.1 0.0006 - 0.009
11	Ailute (420)	90	660	690	0.04 - 0.2 0.003 - 0.05
12	Bigen, Ailute A. (420)	280	660	1300	0.06 - 0.4 0.003 - 0.05
13	Mejel (329)	100	700	730	0.03 - 0.2 0.003 - 0.04

* For uninhabited islands, calculations were based on possibility of 100 people living there in the future

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Cancer Rate

COLUMN WRITE ®

	1	2	3	4	5
Atoll (1)	Initial Population (2)	30-year Bone Marrow $\frac{1000}{\text{rem}}$ (rem) (3)	30-year person $\frac{1000}{\text{rem}}$ (col 1 x col 2) (3)	No. of Births Expected in 30 years (3)	30-year dose (2.36 x col 2) (rem) (3)
30					
1 Rongelap (Rongelap)	200	3.4	680.	400	1.22
2 " (Mabua)		30.	4000.	"	7.2
3 " (Rongelap)	130	3.4	442.	300	1.22
4					
5					
6 Likiep (Likiep)	600	.60	360.	1400	.216
7					
8					
9					
10					
11 Mejit	300	.73	219.	700	.263
12					
13					
14					
15					
16 Uruk (Am)	250	.72	180	580	.259
17 " (Uruk)		.68	170		.2448
18					
19					
20					
21 Ujilang	100	.15	15	230	.054
22					
23					
24					
25					
26 Ailuk (Kapeu)	400	2.5	1000	930	.9
27 " (Bigan)	400	1.3	520	930	.468
28 " (Bereao)	400	.82	320	930	.295
29 " (Ailuk)	400	.69	276	930	.248
30					
31 Notho (withol)	100	.23	23	230	.0828
32 " (Medjiron)	100	.33	33	230	.1188
33 " (Kaften)	100	.20	20	230	.072
34					
35					
36 Taka (Taka)	100	.19	19	230	.068
37 Jemo	100	.50	50	"	.18
38 Bikan	100	1.5	150	"	.54
39 Rongrik (Rongrik)	100	3.8	380	"	1.368
40 Ailinginae (Kury)	100	1.8	180	"	.648

* Highest dose values were used. These were based on BNL

COLUMN WHITE®

	6	7	8	9	10	11
	30-year addition Person (Col. 4 x Col 5)	Total Person (Col 3 + Col 6)	Member of Cancer Deaths			
			BEIR-I absolute (Col 8 x 10 ⁻⁶ per min)	BEIR-I relative (Col 9 x 10 ⁻⁶ per min)	BEIR-II absolute (Col 10 x 10 ⁻⁶ per min)	BEIR-II relative (Col 11 x 10 ⁻⁶ per min)
1	563	1243	.108	.569	.082	.534
2	3312	7312	.636	3.35	.49	3.14
3	366	808	.070	.378	.054	.347
4						
5						
6	302.4	662	.0576	.303	.044	.285
7						
8						
9						
10						
11	183.96	403	.035	.185	.027	.173
12						
13						
14						
15						
16	150.3	330	.0287	.151	.022	.142
17	141.98	312	.0271	.143	.021	.134
18						
19						
20						
21	12.4	27	.00235	.612	.0018	.012
22						
23						
24						
25						
26	837.	1837	.159.8	.841	.123	.79
27	435.24	955	.083.1	.437	.064	.41
28	274.5	595	.051.8	.273	.04	.256
29	231.	507	.0441	.232	.034	.218
30						
31	19	42	.00365	.019	.0028	.018
32	27.3	60	.00522	.027	.0040	.026
33	16.6	37	.00322	.017	.0025	.016
34						
35						
36	15.7	35	.00305	.016	.0023	.015
37	41.4	91	.00792	.042	.0061	.039
38	124.2	274	.023.8	.125	.018	.118
39	314.6	695	.066.5	.318	.047	.299
40	149.	329	.0286	.151	.022	.141

BOX NO. _____
FOLDER Calculations

DOCUMENT DOES NOT CONTAIN ECI

Reviewed by DJ Krowe Date 4/30/97