

Survey 08, Year 1952

<u>Sampling Date</u>		<u>Burst</u>	<u>S</u>
<u>From</u>	<u>To</u>	<u>Date</u>	<u>Factor</u>
306	441 [076, 1953]	123 305	.093

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Survey 09, Year 1953

<u>Sampling Date</u>		<u>Burst</u>	<u>S</u>
<u>From</u>	<u>To</u>	<u>Date</u>	<u>Factor</u>
001	076	-061	.093
077	083	076	.078
084	090	083	.078
091	096	090	.077
097	101	096	.077
102	108	101	.076
109	115	108	.075
116	128	115	.075
129	139	128	.073
140	145	139	.072
146	155	145	.072
156	165	155	.071
166	424	112	.075

TABLE 10. Year 1954

<u>Sampling Date</u>		<u>Surv</u>	<u>S</u>
<u>Date</u>	<u>Date</u>	<u>Date</u>	<u>Factor</u>
081	079	-253	.075
060	088	079	.047
084	094	085	.046
097	115	072	.046
116	124	115	.042
125	133	124	.041
134	143	133	.040
144	207	093	.044
206	276	207	.128
277	286	276	.026
297	320	296	.024
321	346	093	.044

Survey 11, Year 1955

<u>Sampling Data</u>		<u>Barot</u>	<u>S</u>
<u>Line</u>	<u>IR</u>	<u>Data</u>	<u>Factor</u>
001	049	-082	.0250
050	053	049	.0140
054	060	053	.0140
061	066	060	.0130
067	071	066	.0130
072	082	071	.0120
083	088	082	.0120
089	096	088	.0110
097	105	096	.0110
106	125	105	.0100
126	135	125	.0090
136	140	135	.0085
141	152	85	.0120
305	311	-272	.0440
312	327	311	.0014
328	365	327	.0010
366	486	-872	.0018

Survey 11, Year 1955

Survey 12
1956

Sampling Dates	Location	Dr. Factor
122 - 126	093 (MSV) (-657)	.075
127 - 141	126	.008
142 - 148	141	.008
149 - 148	148	.007
164 - 177	163	.006
178 - 184	177	.006
185 - 190	184	.008
191 - 202	190	.008
203 - 240	202	.004
241 - 241	166	.006
242 →	241	.0025

Calendar

Oct 1	1955	274
Nov 1		300
Dec 1		325

Assignments

306 - 311	.093 (1954)
312 - 327	311 USSR
328 - 366	327 USSR
274 - 305	285 (Teague)

S. 1	1100
U. 1	1100

S. 1	1100
U. 1	1100

S. 1	1100
U. 1	1100

<u>Sampling Dates</u>	<u>Analysis</u>	<u>IR Factor</u>
001 - 120	09/14/44	.015
127 - 141	126	.008
142 - 148	141	.008
149 - 163	140	.007
164 - 177	163	.006
178 - 184	177	.006
185 - 190	184	.005
191 - 208	190	.005
209 - 220	202	.004
221 - 241	166	.006
	237	
242 -	(1	.0025
	246)	

EXP. 188 USE - JUNE 23

<u>V₁₀</u>	<u>V₁₂</u>	<u>S Factor</u>
141 - 152	085	.012
• 305 - 311	093 (1934)[-272]	.044
312 - 327	311	.0014
328 - 345	327	.0010
346 - 486	093 (1934)[-272]	

Use Formula

~~5/5 0595M~~

ABOVE
1800kt Fission

5/21 0558M

5/20 1800

5/23 0556M

5/27 1800

6/12 0626M

6/25 0606M

7/3 0606M

7/9 0606M

7/11 0556M

7/21 0546M

7/22 0606M

11
178

Regular Formula for D ($F_{10} - F_{12}$) not greater than 120

Survey 08, Year 1952

<u>Sampling Date</u>		<u>Burst Date</u>	<u>S Factor</u>
<u>From</u>	<u>To</u>		
002 124	305	123	.110
306	425 (059, 1953)	305	.093

Survey 09, Year 1953

<u>Sampling Date</u>		<u>Burst Date</u>	<u>S Factor</u>
<u>From</u>	<u>To</u>		
001	059	-061	.093
077	083	076	.078
084	090	083	.078
091	096	090	.077
097	101	096	.077
102	108	101	.076
109	115	108	.075
116	128	115	.075
129	139	128	.073
140	145	139	.072
146	155	145	.072
156	165	155	.071
166	224	112	.075
225	274	224	.065

Survey 10, Year 1954

<u>Sampling Date</u>		<u>Burst Date</u>	<u>S Factor</u>
<u>From</u>	<u>To</u>		
060	085	059	.047
086	096	085	.045
097	115	072	.046
116	124	115	.042
125	133	124	.041
134	153	133	.040
154	213	093	.044

Survey 10. Year 1954 (Cont'd)

<u>Sampling Date</u>		<u>Buret Date</u>	<u>S</u> <u>Factor</u>
<u>From</u>	<u>To</u>		
258	276	297	.028
277	296	276	.026
297	340	296	.024

Survey 11. Year 1955

<u>Sampling Date</u>		<u>Buret Date</u>	<u>S</u> <u>Factor</u>
<u>From</u>	<u>To</u>		
050	053	049	.0140
054	060	053	.0140
061	066	060	.0130
067	072	066	.0130
072	082	072	.0120
083	088	082	.0120
089	096	088	.0110
097	105	096	.0110
106	125	105	.0100
126	135	125	.0090
136	140	135 May 14	.0085
141	152	085	.012

... positive ... 1955 ...



Special Formula for S ($P_{10} - P_{12}$) greater than 120

Survey 08, Year 1952

<u>Sampling Date</u>		<u>Burst Date</u>	<u>S</u> <u>Factor</u>
<u>From</u>	<u>To</u>		
427	441 (076, 1953)	305	.093

Survey 09, Year 1953

<u>Sampling Date</u>		<u>Burst Date</u>	<u>S</u> <u>Factor</u>
<u>From</u>	<u>To</u>		
060	076	-061	.093
275	424 (059, 1954)	112	.075

Survey 10, Year 1954

<u>Sampling Date</u>		<u>Burst Date</u>	<u>S</u> <u>Factor</u>
<u>From</u>	<u>To</u>		
001	059	-253	.075
214	257	093	.066
341	365	093	.066

Survey 11, Year 1955

<u>Sampling Date</u>		<u>Burst Date</u>	<u>S</u> <u>Factor</u>
<u>From</u>	<u>To</u>		
001	249	-272	.066

2/2

220

3/10

40

3/25

10

4/10

25

6/19

25

A. E. Brandt, Biometrician

November 14, 1956

John W. Harley, Chief, Analytical Branch

EXTRAPOLATION OF MARCH AND APRIL 1956 COMPOSITES.

Symbol: HSA:JHD:krv

These months should be assigned to Castle, that is #93(1954). The fallout is considered to have occurred on the 15th of the month.

The MFP values for January 1, 1957 are calculated as follows:

$$A_2 = A_0 \left(\frac{1096 - 093}{T_0 + 730 - 093} \right)^{-1.2}$$

The other factors are as in my previous memorandum, that is

<u>Month</u>	<u>Sr⁹⁰ (1)</u>	<u>γ Dose (2)</u>
March	.075	.0850
April	.075	.0855

(1) $\text{mc/mi}^2 \text{ MFP} \times \text{Factor} = \text{mc/mi}^2 \text{ Sr}^{90}$

(2) $\text{mc/mi}^2 \text{ MFP} \times \text{Factor} = \text{mrads}$

HSA

HARLEY:krv

11-14-56

A. Brandt, Chief, Statistical Branch
Health and Safety Laboratory

May 1, 1956

John H. Harley, Chief, Analytical Branch
Health and Safety Laboratory

FALLOUT DATA FROM COMPOSITES.

Symbol: HSA:JHM

The following monthly data should be added to the fallout summary. The values are calculated from monthly composites taken during the indicated months.

A comparison of daily and composited samples for two months was made to check the validity of results.

<u>Period</u>	<u>Station</u>	<u>Attributed to</u>	<u>Daily</u>	<u>Composite</u>
Oct. '54	31	USSR *	1.11	0.93
Feb. '55	51	Castle **	1.55	1.45

* Counted about 5/1/55, decay factor = 0.41

** Counted about 8/23/55, decay factor = 0.84

The agreement is reasonable and appears to justify the calculation.

The values in the attached table are calculated from composites with the following factors:

Extrapolation Factors to 1/1/56 (730)

<u>Attributed to</u>	<u>Count Date</u>	<u>Factor</u>
Castle (093)	4/15/55 (470)	0.55
	5/1/55 (486)	0.58
	5/15/55 (501)	0.60
	6/1/55 (517)	0.63
	7/1/55 (547)	0.68
	8/1/55 (578)	0.73
	9/1/55 (609)	0.80
USSR (275)	4/15/55 (470)	0.37
	5/1/55 (486)	0.41
	5/15/55 (501)	0.44
	6/1/55 (517)	0.48
	7/1/55 (547)	0.55

HSA

HARLEY:krw

5-1-56

Enclosure:
1. Table

cc: M Eisenbud, H
J H Harley, HSA

1954 Composites

(Only December Available Now)

<u>Station</u>	<u>d/m on C-date</u>	<u>C-date</u>	<u>mg/mi²</u> <u>WPP</u>	<u>1/1/56</u> <u>8y-90</u>
117	256	6/29/55	1.18	0.031
509	26	6/27/55	0.17	0.006
510	28	6/27/55	0.19	0.005
518	75	6/27/55	0.51	0.013
519	23	6/27/55	0.16	0.006
601	143	7/30/55	1.07	0.028
606	506	6/29/55	3.68	0.090
608	145	6/29/55	1.00	0.026
611	270	6/29/55	1.86	0.048
702	726	6/29/55	5.00	0.130
706	193	6/29/55	1.33	0.036
713	118	6/30/55	0.81	0.021
803	113	6/30/55	0.78	0.020
810	236	6/30/55	1.63	0.042
811	98	6/30/55	0.68	0.018
815	79	6/30/55	0.56	0.016
915	30	6/30/55	0.21	0.005

A. Brandt, Chief, Statistical Branch
Health and Safety Laboratory

May 2, 1956

John H. Harley, Chief, Analytical Branch
Health and Safety Laboratory

REASSIGNMENT OF BURST DATES.

Symbol: NSA:JHE

A check of the daily values being prepared for the current summary show that some changes in burst assignment are required. In addition, information is now available for assignment of some debris to Russian tests during the Fall of 1953. The following groups of samples would be affected:

1. Series 9. The samples from Day 225 to Day 274 should be assigned to a foreign burst on Day 224.
2. Series 10. The current assignment for the burst on Day 133 is 134 to 143. This should be extended to 153.
3. Series 10. The current assignment for the foreign burst on Day 296 is 297 to 300. This should be extended to 340.

A new assignment table is being prepared including these changes.

cc: M. Mendenhall, Manager
J. H. Harley, NSA

HSA

HARLEY:krw

5-2-56

COMPOSITE SAMPLES

1956 Factors

<u>Month</u>	<u>Total (1)</u> <u>Activity</u>	<u>(2)</u> <u>Fr⁹⁰</u>	<u>(3)</u> <u>̄ Date</u>
January	093 (195h)	.075	.0845
March	093 (195h)	.075	.0850
April	093 (195h)	.075	.0855

(1) Assign to 093 (195h) for mCi/m^2 but calculate to 1/1/57.

(2) Factor for multiplying total activity to give Fr^{90} mCi/m^2 on 1/1/57.

(3) Multiply total activity, mCi/m^2 on 1/1/57 to get unadsorbed activity.

COMPOSITE SAMPLES

1956 Factors

<u>Month</u>	<u>Total (1)</u> <u>Activity</u>	<u>(2)</u> <u>Sp⁹⁰</u>	<u>(3)</u> <u>Y. Date</u>
January	093 (1954)	.075	.0815
March	093 (1954)	.075	.0850
April	093 (1954)	.075	.0855

(1) Assign to 093 (1954) for m/mi^2 but calculate to 1/1/57.

(2) Factor for multiplying total activity to give Sp^{90} m/mi^2 on 1/1/57.

(3) Multiply total activity, m/mi^2 on 1/1/57 to get m/mi^2 infinity date.

155 Burses

311

327

Issues

306 - 311

312 - 327

328 - 366

Assess

093 (1.04)

311

327

Sr. Falcon

.044

.0014

.0010