729470

MEDICAL QUESTIONNAIRE FOR CERT TEST

Name [redacted] Sex M

Height 5' 11" Weight 180 Age 31

1. Have you ever had any known thyroid disease (overactive, underactive, gorter, nodules, surgery, etc.)? Yes ___ No ✓

2. Have you ever had any thyroid function tests - basal metabolism tests, protein-bound iodine blood tests, radioactive iodine uptake tests? Yes ___ No ✓

3. Have you ever had any known exposures to radioactive iodine beyond permissible limits? Yes ___ No ✓

4. Have you taken any drugs during the past month? Yes ___ No ✓

5. Are you taking any vitamin or mineral preparations? Yes ___ No ✓
If so, do list iodine on the contents, or is there iodine in them to your knowledge? Yes ___ No ___

6. Have you had any x-ray studies within the past year in which a radio-opaque dye is used - such as, gallbladder x-rays, or bronchograms? Yes ___ No ✓

7. Are you using iodized table salt at home? Yes ✓ No ___

Describe details of any "yes" answers to questions 1-6.

Note: Medical records don't reflect involvement with capsule studies

Redacted Version
by [signature]
date 8/25/95

REPOSITORY INEL
COLLECTION Assurance Div Ref Matls Pubs. & Procedure Manuals
BOX No. INEL NRE Team File Cabinet
FILE: folder: INEL Human Research Projects
SUBJ:
FOLDER Various Volunteer Consent Forms

1260425

S. Atomic Energy Commission
Health and Safety Division

VOLUNTARY CONSENT FOR PERSONAL PARTICIPATION
IN SCIENTIFIC HUMAN STUDIES

I, [redacted], do hereby acknowledge that I have volunteered as an AEC employee to participate personally in a scientific investigation promoted by and for the Atomic Energy Commission. I understand the study requires me to take internally a small quantity or quantities of radioisotopes which has been estimated by the investigators and the ID Medical Branch to deliver less than 10 per cent of the radiation guide limits permitted me for occupational radiation exposure. I understand that a documented record of these isotope studies will be on file with the ID Health and Safety Division as part of my occupational exposure and/or medical record.

[redacted]
Signature

29 October 1965
Date

Witnesses:

Signature

Signature

Experiment No. 6

Nuclide Taken	Quantity, uc.	Date Taken	T 1/2 eff. days	Administration: Chemical Form	Administration: Physical Form	Administration: Route
Cs^{132}	4.0/200		6.2	$CsCl_2$	liquid	Oral

Approved By: [signature]
Chief, Analytical Chemistry Branch
Date: 10-29-65

[signature]
Chief, Medical Branch
Date: 10-29-65

Study Completed: 11/22/65
Date

1260426

file

S. Atomic Energy Commission
Health and Safety Division

VOLUNTARY CONSENT FOR PERSONAL PARTICIPATION
IN SCIENTIFIC HUMAN STUDIES

I, [redacted], do hereby acknowledge that I have volunteered as an AEC employee to participate personally in a scientific investigation promoted by and for the Atomic Energy Commission. I understand the study requires me to take internally a small quantity or quantities of radioisotopes which has been estimated by the investigators and the ID Medical Branch to deliver less than 10 per cent of the radiation guide limits permitted me for occupational radiation exposure. I understand that a documented record of these isotope studies will be on file with the ID Health and Safety Division as part of my occupational exposure and/or medical record.

[redacted]
Signature

June 16, 1966
Date

Witnesses:

Don B. Martin
Signature

Ronald W. Stone
Signature

Experiment No. 8

Nuclide Taken	Quantity, uc.	Date Taken	T 1/2 eff. days	Administration: Chemical Form	Administration: Physical Form	Administration: Route
I^{131}	1.1	6/20/66	7 days		Insoluble Capsule	ORAL

Approved By: [signature] Date: 6-16-66
Chief, Analytical Chemistry Branch

[signature] Date: 6-17-66
Chief, Medical Branch

Study Completed: 6-22-1966
Date

1260427

HISTORIES
RTW/RESTR-ID-13s

VOLUNTARY CONSENT FOR PERSONAL PARTICIPATION
IN SCIENTIFIC HUMAN STUDIES

I, [redacted], do hereby acknowledge that I have volunteered as an AEC employee to participate personally in a scientific investigation promoted by and for the Atomic Energy Commission. I understand the study requires me to take internally a small quantity or quantities of radioisotopes which has been estimated by the investigators and the ID Medical Branch to deliver less than 10 per cent of the radiation guide limits permitted me for occupational radiation exposure. I understand that a documented record of these isotope studies will be on file with the ID Health and Safety Division as part of my occupational exposure and/or medical record.

[redacted]
Signature

7/11/65
Date

Witnesses:

Katherine Parker
Signature

Roy E. Howard Jr
Signature

Experiment No. 4

Nuclide Taken	Quantity, uc.	Date Taken	T 1/2 eff. days	Administration: Chemical Form	Administration: Physical Form	Administration: Route
Ar^{41}	2.0	8/12/65	<<<.08	Inert Gas	Gas	Resp.

Approved By: Claude Sill
Chief, Analytical Chemistry Branch
Date: 8/11/65

George R. Cook MD
Chief, Medical Branch
Date: 8/11/65

Study Completed: 8/12/65
Date

1260428

U. S. ATOMIC ENERGY COMMISSION
Idaho Operations Office, Health and Safety Division
Idaho Falls, Idaho

VOLUNTARY CONSENT FOR PARTICIPATION IN HUMAN STUDIES

SUMMARY OF STUDY Identification No. [redacted]

Description and Purpose: The purpose of the proposed study is to complete a study already in progress to develop additional applications for the helical-scan counter. A high-resolution focusing collimator has been added to the equipment so that the spatial resolution has been markedly improved. Positions of different nuclides that are in close proximity to each other can be resolved. An initial test of this different counting system and new computer programs has been completed. In order to complete the study and have the necessary data for publication, the positions of

^{141}Ce	4.0	14	(see reverse side)
^{51}Cr	40	234	

Nuclide ^{85}Sr; Quantity 4.0 uc.; Guide value 26 uc.; Critical organ LLI; Effective half life 30 hours; Chemical form Polyethylene capsule; Chemical toxicity None; Physical form Polyethylene capsule; Route G. I. Tract.

Investigator Jesse I. Anderson Date 1-28-72

VOLUNTARY CONSENT

I, [redacted], do hereby acknowledge that: (1) I have volunteered to participate personally in a scientific investigation promoted by and for the U. S. Atomic Energy Commission; (2) I understand that the study requires me to take internally a small quantity of a radioisotope that has been determined by the investigator and confirmed by a review committee to be less than the radiation guide limits permitted by AECM 0524 for occupational exposure; (3) I understand that expert opinion regards the radiation exposures approved for this study to be so low that no harmful effects are expected; (4) I have read the description of the proposed study above and have been given ample opportunity to discuss and/or clarify any questions that I might have concerning it; (5) I have been informed and assured by my administrative superiors that participation in this study is not in any way a condition of employment, and that I may refuse to participate, or to withdraw my consent at any time during the course of the study, without incurring any adverse reaction to the normal course of my employment; and (6) I understand that a documented record of these studies will be on file in the ID Health and Safety Division as part of my occupational exposure and/or medical record.

[signature] [redacted] 1-10-72
Signature of Witness [redacted] Volunteer [redacted] Date

REVIEW AND APPROVAL

[signature] 1-11-72
Chief, Analytical Chemistry Branch Date

[signature] 1-13-72
Chief, Medical Branch Date

Date of Administration 1/28/72 Study Completed 1/28/72 Actual Dose 0.13 Rem.

Investigator [signature] Date 1/28/72

1260429

three (3) different nuclides need to be determined repeatedly along the G. I. Tract of a human subject. One part of the study will be to use a new computer technique to display the counting data dynamically to show the movement of nuclides in the body. The procedure will be to do helical scans of an individual repeatedly over a 24-hour period after he has ingested 4.0 μCi of ^{141}Ce, 40 μCi of ^{51}Cr and 4.0 μCi of ^{85}Sr. Each radionuclide will be contained inside a polyethylene capsule.

1260430

[redacted]. S. Atomic Energy Commission [redacted]
Idaho Operations Office, Health and Safety Division
Idaho Falls, Idaho

VOLUNTARY CONSENT FOR PARTICIPATION IN HUMAN STUDIES

SUMMARY OF STUDY Identification No. 19

Description and Purpose

A human subject will ingest Cs 137 and Co 60 in separate polyethylene capsules. The time of ingestion of each nuclide will differ by approximately 1 hour. The purpose of the study is to test the capability of our helical scanning method to follow specific nuclides, as to quantity and distribution, as they change position in the body. This study is a good prerequisite to other in vivo translocation studies for internally deposited nuclides that may involve the GI tract, pulmonary system, etc.

Nuclide Cs 137 Quantity 1.6 uc.; Guide value ~~3.0~~ 3.7 uc.; Critical
Co 60 1.5 ~~3.3~~ 2.7 uc.
organ LI ; Effective ~~[illegible]~~ life 1.4 days; Chemical form Polyethylene Capsule ;

Chemical toxicity None ; Physical form Solid ; Route Oral ,

Investigator Jesse I. Anderson Date January 20, 1970

VOLUNTARY CONSENT

I, [redacted], do hereby acknowledge that: (1) I have volunteered to participate personally in a scientific investigation promoted by and for the U. S. Atomic Energy Commission; (2) I understand that the study requires me to take internally a small quantity of a radioisotope that has been determined by the investigator and confirmed by a review committee to be less than the radiation guide limits permitted by AECM 0524 for occupational exposure; (3) I understand that expert opinion regards the radiation exposures approved for this study to be so low that no harmful effects are expected; (4) I have read the description of the proposed study above and have been given ample opportunity to discuss and/or clarify any questions that I might have concerning it; (5) I have been informed and assured by my administrative superiors that participation in this study is not in any way a condition of employment, and that I may refuse to participate, or to withdraw my consent at any time during the course of the study, without incurring any adverse reaction to the normal course of my employment; and (6) I understand that a documented record of these studies will be on file in the ID Health and Safety Division as part of my occupational exposure and/or medical record.

Bill Barnett [redacted] 1-20-70
Signature of Witness Signature of Volunteer Date

REVIEW AND APPROVAL

[redacted] 1-21-70
Chief, Analytical Chemistry Branch Date

John [illegible] MD 1-21-70
Chief, Medical Branch Date

Date of Administration 1-21-70 Study Completed 1-23-70 Actual Dose < 3.7 Rem.

Investigator [illegible] Date 1-23-70

1260431

[redacted] S. Atomic Energy Commissio[redacted]
Health and Safety Division

VOLUNTARY CONSENT FOR PERSONAL PARTICIPATION
IN SCIENTIFIC HUMAN STUDIES

I, [redacted], do hereby acknowledge that I have volunteered as an AEC employee to participate personally in a scientific investigation promoted by and for the Atomic Energy Commission. I understand the study requires me to take internally a small quantity or quantities of radioisotopes which has been estimated by the investigators and the ID Medical Branch to deliver less than 10 per cent of the radiation guide limits permitted me for occupational radiation exposure. I understand that a documented record of these isotope studies will be on file with the ID Health and Safety Division as part of my occupational exposure and/or medical record.

[redacted]
Si[redacted]ure

8/11/65
Date

Witnesses:

Leigh L Thompson
Signature

Dale G Olson
Signature

Experiment No. 5

Nuclide Taken	Quantity, uc.	Date Taken	T 1/2 eff. days	Administration: Chemical Form	Administration: Physical Form	Administration: Route
Ar^{41}	2.0	8/12/65	<<< .08	Inert Gas	Gas	Resp.

Approved By: Claude W Sill
Chief, Analytical Chemistry Branch
Date: 8-11-65 ? 8-12-65

George L. Voch
Chief, Medical Branch
Date: 8-12-65

Study Completed: 8/12/65
Date

1260432

VOLUNTARY CONSENT FOR PERSONAL PARTICIPATION
IN SCIENTIFIC HUMAN STUDIES

I, [redacted], do hereby acknowledge that I have volunteered as an AEC employee to participate personally in a scientific investigation promoted by and for the Atomic Energy Commission. I understand the study requires me to take internally a small quantity or quantities of radioisotopes which has been estimated by the investigators and the ID Medical Branch to deliver less than 10 per cent of the radiation guide limits permitted me for occupational radiation exposure. I understand that a documented record of these isotope studies will be on file with the ID Health and Safety Division as part of my occupational exposure and/or medical record.

Witnesses:

[redacted] Signature

5-7-65
Date

Experiment No. 1 of date May 10 1965

Proposed Route of Administration Oral

Isotope Manganese 54 Chemical Form Chloride

Proposed Quantity 1 μc

Form of Administration: Capsule, Insoluble ✓

Soluble Capsule _____ Liquid _____

Solid _____

Approved By: Date 5-7-65

Date 5-7-65

Completed 5-11-65 0147 hr

T260433

U. S. Atomic Energy Commission
Health and Safety Division

VOLUNTARY CONSENT FOR PERSONAL PARTICIPATION
IN SCIENTIFIC HUMAN STUDIES

I, [redacted] do hereby acknowledge that I have volunteered as an AEC employee to participate personally in a scientific investigation promoted by and for the Atomic Energy Commission. I understand the study requires me to take internally a small quantity or quantities of radioisotopes which has been estimated by the investigators and the ID Medical Branch to deliver less than 10 per cent of the radiation guide limits permitted me for occupational radiation exposure. I understand that a documented record of these isotope studies will be on file with the ID Health and Safety Division as part of my occupational exposure and/or medical record.

[redacted]
Signature

Nov 15 - 1965
Date

Witnesses:

[illegible]
Signature

[illegible]
Signature

Experiment No. 7

Nuclide Taken	Quantity, uc.	Date Taken	T 1/2 eff. days	Administration: Chemical Form	Administration: Physical Form	Administration: Route
K^{42}	2/4u	11/1	0.52	KCl	liquid	Oral

Approved By: [illegible]
Chief, Analytical Chemistry Branch
Date: 11-16-65

[illegible]
Chief, Medical Branch
Date: 11-17-65

Study Completed: 11/22/65
Date

1260434

PHYSICAL HISTORIES
RTW/RESTR-ID-13s

VOLUNTARY CONSENT FOR PERSONAL PARTICIPATION
IN SCIENTIFIC HUMAN STUDIES

I, [redacted], do hereby acknowledge that I have volunteered as an AEC employee to participate personally in a scientific investigation promoted by and for the Atomic Energy Commission. I understand the study requires me to take internally a small quantity or quantities of radioisotopes which has been estimated by the investigators and the ID Medical Branch to deliver less than 10 per cent of the radiation guide limits permitted me for occupational radiation exposure. I understand that a documented record of these isotope studies will be on file with the ID Health and Safety Division as part of my occupational exposure and/or medical record.

[redacted]
Signature

5/12/66
Date

Witnesses:

Don B. Martin
Signature

Leroy E. Howard
Signature

Experiment No. 10

Nuclide Taken	Quantity, uc.	Date Taken	T 1/2 eff. days	Administration: Chemical Form	Administration: Physical Form	Administration: Route
Co^{60}	1.1	6-20-66	9.5		Insoluble Powder	ORAL

Approved By: [signature]
Chief, Analytical Chemistry Branch
Date: 6-16-66

[signature]
Chief, Medical Branch
Date: 6-17-66

Study Completed: 6-22-66
Date

1260435

MEDICAL QUESTIONNAIRE FOR CERT TEST

Name [redacted] Sex Male

Height 6'2" Weight 150 Age 31

1. Have you ever had any known thyroid disease (overactive, underactive, gorter, nodules, surgery, etc.)? Yes___ No X

2. Have you ever had any thyroid function tests - basal metabolism tests, protein-bound iodine blood tests, radioactive iodine uptake tests? Yes ___ No X

3. Have you ever had any known exposures to radioactive iodine beyond permissible limits? Yes ___ No X

4. Have you taken any drugs during the past month? Yes___ No X

5. Are you taking any vitamin or mineral preparations? Yes___ No X If so, do list iodine on the contents, or is there iodine in them to your knowledge? Yes___ No___

6. Have you had any x-ray studies within the past year in which a radio-opaque dye is used - such as, gallbladder x-rays, or bronchograms? Yes___ No X

7. Are you using iodized table salt at home? Yes X No ___

Describe details of any "yes" answers to questions 1-6.

MICROFILM RECORD YES NO

1260436

Experiment Number	Date Taken	Name of Volunteer	Nuclide	Quantity	Mode	Chemical Form	Effective Half-life	Date Completed	Initials
			Administered						
1	5-16-65	[redacted]	Mn^{54}	1.1 μc	Insol. capsule oral	Chloride	5.2 days	5-11-65 0747 hr.	JA
2	6/25/65	[redacted]	A^{41}	2.0 μc	Inert Gas	gas	<< 0.076 d	6/25/65	DJO
3	7/15/65	"	"	"	"	"	"	7/15/65	DJO
4	8/12/65	"	"	"	"	"	"	8/12/65	DJO
5	8/12/65	[redacted]	A^{41}	2.0 μc	Inert Gas	"	"	8/12/65	JA
~~6~~	10/25/65	[redacted]	Cs^{132}		Scrubbed				DJO
6	11/1/65	[redacted]	Cs^{132}	2 μc	oral	Soln		11/15/65	DJO
7	11/15/65	[redacted]	K^{42}	2 μc	Oral	KCl	0.52	11/19/65	DJO
8	6/16/66	[redacted]	I^{131}	1.1 μc	"	Insol. Capsule	7 d	6/22/66	DJO
9	7/27/66	[redacted]	$ZrNb^{95}$	1.1 μc	"	"	33.5 d	7/27/66	
10	6/18/66	[redacted]	Co^{60}	1.1 μc	"	"	9.5 d	6/22/66	DJO
11		[redacted]	Cs^{137}	1.63 μc	"	"	N24 hr	Cancelled	DJO
12		[redacted]	Ce^{144}	1.4 μc	"	"	N24 h	Cancelled	DJO
13	8/16/66	[redacted]	Ag^{110m}	0.72 μc	"	"	"	8/16/66	DJO
14		[redacted]	Zn^{65}	3 μc	Scrubbed				
15		[redacted]	Ru^{106}	1.2 μc	"	"	"	Cancelled	DJO
16		[redacted]	ZN^{65}	2.2 μc	Transferred		Rx time 18/24 day		
~~17~~		[redacted]							
18		[redacted]	I^{131}	1.2 μc				Cancelled	DJO
19	1-21-70	[redacted]	Co^{60} Cs^{137}	1.5 μCi 1.6 μCi	Insoluble Capsules	Nitrates	30 hrs IN GI tract	1-22-70	JA
20		[redacted]	I^{131}	0.3 μci	~~Oral~~	OK I d	~~6 day~~		
21	4/15/71	[redacted]	A^{41}	2.0 μci	Inert Gas	gas	<0.08	Cancelled	DJO
22	4/27/71	[redacted]	A^{41}	2.0 μCi	Inert Gas	gas	<0.08		
23		[redacted]	A^{41}	2.0 μCi	Inert Gas	gas	<0.08		
24		[redacted]	A^{41}	2.0 μCi	Inert Gas	gas	<0.08		
25		[redacted]	A^{41}	2.0 μCi	Inert Gas	gas	<0.08		
26		[redacted]	A^{41}	2.0 μCi	Inert Gas	gas	<0.08		

1260437

Experiment Number	Date Taken	Name of Volunteer	Nuclide Administered	Quantity Administered	Mode Administered	Chemical Form	Effective Half-life	Date Completed	Initials
1	5-10-65	[redacted]	Mn^{54}	1.1 μc	Insol. capsule oral	Chloride	5.2 days	5-11-65 0747 hr.	JA
2	6/25/65	[redacted]	A^{41}	2.0 μc	Inert Gas	gas	<< 0.076 d	6/25/65	DJO
3	7/15/65	"	"	"	"	"	"	7/15/65	DJO
4	8/12/65	"	"	"	"	"	"	8/12/65	DJO
5	8/12/65	[redacted]	A^{41}	2.0 μc	Inert Gas	"	"	8/12/65	JA
~~6~~	10/~~25~~/65	[redacted]	Cs^{132}		Scrubbed				DJO
6	11/1/65	[redacted]	Cs^{132}	2 μc	oral	Soln		11/15/65	DJO
7	11/15/65	[redacted]	K^{42}	2 μc	Oral	KCl	0.52	11/19/65	DJO
8	6/16/66	[redacted]	I^{131}	1.1 μc	"	Insol Capsule	7 d	6/22/66	DJO
9	7/27/66	[redacted]	$ZrNb^{95}$	1.1 μc	"	"	33.5 d	7/27/66	
10	6/18/66	[redacted]	Co^{60}	1.1 μc	"	"	9.5 d	6/22/66	DJO
11		[redacted]	Cs^{137}	1.63 μc	"	"	N24 hr	Cancelled	DJO
12		[redacted]	Ce^{144}	1.11 μc	"	"	N24 h	Cancelled	DJO
13	8/16/66	[redacted]	Ag^{110m}	0.72 μc	"	"	"	8/16/66	DJO
14		[redacted]	Zn^{65}	3 μc	Scrubbed LEA				
15		[redacted]	Ru^{106}	1.2 μc	"	"	"	Cancelled	DJO
16		[redacted]	ZN^{65}	2.9 μc	Transferred		Rm Time 18/24 day		
~~17~~		[redacted]							
18		[redacted]	I^{131}	1.2 μc				Cancelled	DJO
19	1-21-70	[redacted]	Co^{60} Cs^{137}	1.5 μCi 1.6 μCi	Insoluble Capsules	Nitrates	30 hrs IN GI tract	1-22-70	JA
20		[redacted]	I^{131}	0.3 μci	~~Oral~~	OK I d	~~6 day~~		
21	4/15/71	[redacted]	A^{41}	2.0 μci			08	Cancelled	DJO
22	4/27/71	[redacted]	A^{41}	2.0 μCi			08		
23		[redacted]	A^{41}	2.0 μCi			08		
24		[redacted]	A^{41}	2.0 μC			08		
25		[redacted]	A^{41}	2.0 μCi			08		
26		[redacted]	A^{41}	2.0 μCi	Inert Gas	gas	<0.08		

Ar-41 not part of overall study

1260438

Experiment Number	Date Taken	Name of Volunteer	Nuclide	Quantity	Mode	Chemical Form	Effective Half-life	Date Completed	Initials
			Administered						
27	-	[redacted]	A^{41}	20 μCi	Inert Gas	Gas	<0.08	Cancelled	DJd
28		[redacted]	A^{41}	20 μCi	Inert Gas	Gas	<0.08		
29	4/15/70	[redacted]	A^{41}	20 μCi	Inert Gas	Gas	<0.08		
30		[redacted]	Kr^{85m}	20 μc	"	"	<0.08		
31		[redacted]	"	"	"	"	"		
32		[redacted]	"	"	"	"	"		
33		[redacted]	"	"	"	"	"		
34		[redacted]	"	"	"	"	"		
35		[redacted]	"	"	"	"	"		
36		[redacted]	"	"	"	"	"		
37	-	[redacted]	^{141}Ce ^{51}Cr ^{80}Sr	4 40 4	Insol. Capsule	~~Ins.~~	30 hrs GI tract	1-28-72	[illegible]
38		[redacted]	^{133}Xe	3 μCi	Inert Gas	Gas	<0.08 d	Cancelled	DJd
39		[redacted]	"	"	"	"	"		
40		[redacted]	"	"	"	"	"		
41		[redacted]	"	"	"	"	"		

From Human Nuclide Studies Logbook

1260439

Gessel 11/4/86

Authors
Question RESL pers. on list

Following involved in

1. [redacted]
2. [redacted]
3. [redacted]
4. [redacted]
5. [redacted]
6. [redacted]
7. [redacted]
8. [redacted]
9. [redacted]
10. [redacted]
11. [redacted]
12. [redacted]
13. [redacted]
14. [redacted]
15. [redacted]
16. [redacted]
17. [redacted] ← ?
18. [redacted] ([redacted])
19. [redacted] ([redacted])
20. [redacted]

12053

Cert 2 - 3 people inhaled 12047
15, 7.7, 6.1 mrad to thyroid

21. [redacted]
22. [redacted] ← ?

Possible additional volunteers
1. [redacted]
2. [redacted]
3. [redacted]
4. [redacted]

5 Cert Reports

12035 - C. Hawley
C. Sill
G. Voelz

12047 - C. Hawley
D.R. Adam
D F Bunch
W.P. Gamill
E.H. Markee
M.W. Tiernam

12053 - Adams
Bunch
J.B. Echo
Gamill
Hawley
Tiernam
Markee

12063 - Bunch - Ed
Echo
Adams
Markee
R. McBride
Newcomb
Mortenson
G. Ball
J.T. Collins
W.J. Harvie

acknowled.

12065 - J.D. Zimbirck
P. Voillegue
C.A. Pelletier
L.J. Lowder
J.B Echo
E.H. Markee

42-381 50 SHEETS 5 SQUARE
42-382 100 SHEETS 5 SQUARE
42-389 200 SHEETS 5 SQUARE
NATIONAL

1260440

Spickard 0404

1 [redacted] 5-10-65 1-21-70 ~~1-20~~ 4-15-70

2 11-1-65

3 ~~#~~ 11-15-65

4 6-16-66

5 7-27-66

6 6-18-66

7 8-16-66

8

min. of 18 people
two sets of initials not defined
16 known
15 can be found
+ [redacted]
can interview the above to define others
Authors of reports may provide some info on volunteers
e.g. P. Voillique

(200 - 600 mRad to thyroids of milk drinkers

Volunteers (I-131) 7/24/80 → 5/27/63 → test date

1.	0.38 Rads	0.63 Rads	0.39 Rads
2.	0.23 "	0.36 "	
3.	0.42 "	0.32 "	

[redacted] 5 of 7 volunteers

15 - 30 mRad - to I-131 breathers

1260441