JF Ptak Science Books

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Nuclear Weapons List

Following is a sample of some of the stock here relating to nuclear weapons. These are professional reports, and really rather quite scarce, as it turns out--of the examples below only one paper is located in WorldCat/OCLC, (and with only one copy) while the others seem to be entirely unlocated

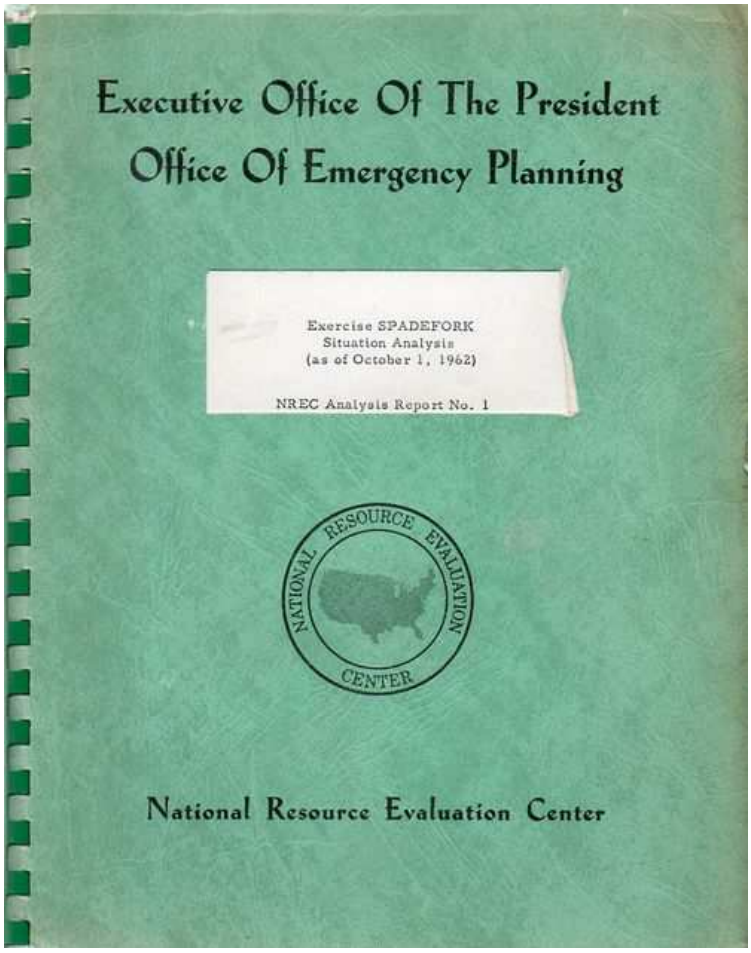
- What Happens After a 1,667 Megaton Nuclear Attack (1962) WorldCat/OCLC 1 copy
- What Happens To Essential Personnel in a Nuclear Attack? (1956) WorldCat/OCLC 0 copies
- Organization and Staffing/Damage Assessment Division/Production Area WorldCat/OCLC 0 copies
- The Bomb Damage Problem, AFAPA-4-4 WorldCat/OCLC locates 0 copies
- A Study of the Demography of Nuclear War WorldCat/OCLC locates 0 copies
- Get Out of Hell Free card (unique)

In general this material seems to be very uncommon.

What Happens After a 1,667 Megaton Nuclear Attack (1962)

Exercise SPADEFORK Situation Analysis, printed by the Executive Office of the President, Office of Emergency Planning. 1962. 11x8". This report on Exercise Spadefork was issued at the very beginning of the Cuban Missile Crisis on October 1,1962. Undertaken by the National Resource Evaluation Center (NREC) and other agencies it was supposed to give a good indication of what happens after a very large nuclear attack on the United States, "Measuring the Capability of Survival", evaluating what remains of the country and its sovereignty.

It is odd that even though this document received a small circulation there is only one copy (at the U.S. Army Heritage Center library) located in the massive database, WorldCat/OCLC. $750



The theoretical attack began at 3pm, Friday 21 September 1962. 221 nuclear missiles were exploded in/over the U.S. In the first hour, with a total of 355 in the first 48 hours. [I'm not sure that the Soviet Union had 221 intercontinental ballistic missiles at this time, nowhere near that, unless of course they were able to get their 700-missile medium-range ballistic missiles closer to the U.S.]

A total of 1, 779 megatons were exploded almost equally between ground and air bursts.

20 were 1 megaton; 15 were 10 megaton, and 320 were 5 megaton.

- The Hiroshima weapon was about 20 kilotons, so in the roughest sense each one of the 5 megaton weapons carried about 250 Hiroshima weapons; the total 1,779 megaton delivery would (grossly) be equal to about 178,000 Hiroshima weapons.

Most of the attack was delivered against military sites, "population and industrial centers appeared to be secondary targets, with only about 50 major centers receiving significant amount of blast damage". Somehow "no major sections of the country were isolated due to fallout contamination".

How we make out:

Military & "Sovereignty": not so bad. Air Force and Navy take major hits (something approaching 50% casualties) but the Army does better, not being targeted so heavily, with 20% losses.

"While our sovereignty is preserved, there are some troublesome areas" (page 10), the very first notice being that "over ½ of the federal civilian personnel are available to work but with only ¼ of the actual floor space in about half of the offices normally functioning".

And by the way "our normal Federal headquarters at Washington, D.C. Is severely damaged and completely out of operation". The "headquarters" being, basically, downtown D.C.

Federal workers out in the country away from D.C. fared better.

Communications: in this report 80% of pre-attack telephones and 95% of pre-attack central stations... [would] be in service and have access to toll routes".(pg 15) though "no route [would be] intact for transcontinental or through north-south traffic".

Radio does better at night: "it is evident that heavy damage to radio stations will leave some areas with little or no daytime coverage, but night time coverage should still be good".

Finance: "sufficient banking capacity has survived to support the surviving productive capability...the Federal Reserve System, though badly damaged, is in a position to support surviving banking institutions".

One third of the $18 billion held by the Fed has been destroyed...though there will be enough currency

in circulation "for a reduced level of economic activity, although there may be some local shortages..."

One-half to two-thirds of the commercial banking system survives.

The board of the Federal Reserve also survives.

Population: 21 million die either immediately or shortly after the attack from blast effects, with 13 million dying from fallout, making the total 34 million. 17 million are injured and expected to recover. 135 million do not have a significant injury. 51 million total. Most of these are in big cities, though we see that the states of MA, WA, VT, TN, Wva, OR suffer 42%-49% casualties, CT, MO, IL, MI, DE, NY, CA, OK, TX, LA, KS, NM, OH all suffer 30%-38% casualties. D.C. Leads away with 88% casualties.

Medical: a big topic dispensed with in two sentences (and to be read while whistling a happy tune), and which seems to make little sense at all when discussing injury rates in the 2 million range and their treatment. In shorter than the shortened story, all inventories of medical supplies "could provide for needs for the first 25 days. Deficiencies would occur on many items..."

No mention of medical personnel or facilities survivability is made.

Somehow though 70%-95% pf drug and pharmaceutical companies survive and operate, though the manpower is down 25%. How this occurs when so many of these places are located near large cities that have been decimated, I do not know.

Food: the report assumes that food stocked "in the home, the retail store, and the small wholesaler would be sufficient to meet local needs for 30 days..." I think everyone has seen what happens to food and toilet paper when a snow storm threatens. Also grain mill products, sugar factories, production of fats and oils, meat/dairy/bakery services would be 40% available after 30 days.

About 50% of "lands in farms and 46% of crops harvested" would be available immediately. By D+30 88% would be available.

Leading the way for operations under "non-emergency conditions" is tobacco, 91.6% of farms being available after 30 days. Fruit and nut and vegetable production is last at 75% after 30 days.

Housing: it is calculated that on a nationwide basis that "housing will not constitute a major problem from the standpoint of requirements for materials and manpower". Most of this evidently is

accomplished by doubling-up occupancy "from pre-attack levels of .65 persons per room to 1.26".

"Early decisions as to investment in physical plant will great effect subsequent GNP".

21% of steel and 34% of all industry (?) is available immediately after attack, the numbers jumping to 55% and 52% with emergency effort after 90 days, with the balance "denied w/o major repair or decontamination".

Part of the report concentrated on how dependable the data are, and how reliable the interpretation was . In summary it seems to my reading that the exercise showed fairly accurate information, and given the massive attack that the sovereignty (measured in terms of governance and military capacity) and the capability to survive (meaning financial structure, production, industry, population) remains basically intact even given large amounts of destruction. The bottom line is that the country survives and gets on with life. The report has nothing to do with the U.S. response, or the outcome of the war.

What Happens To Essential Personnel in a Nuclear Attack? (1956)

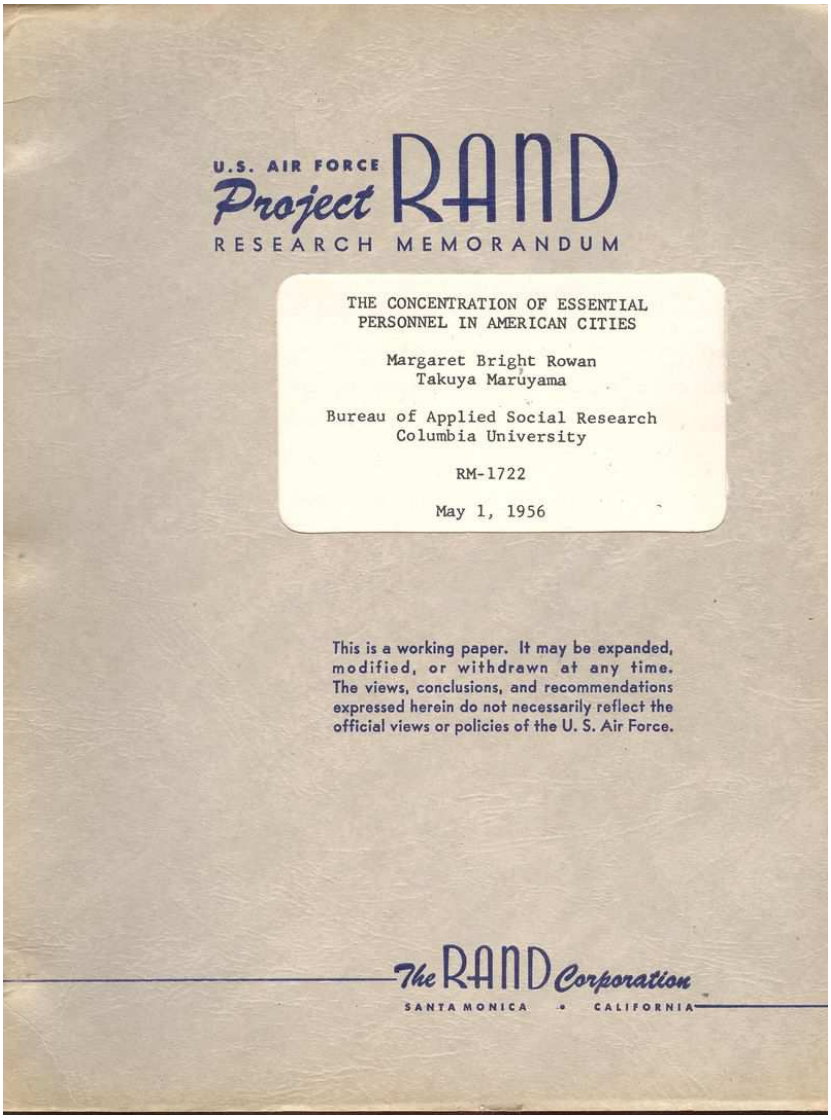
The Concentration of Essential Personnel in American Cities. Margaret Bright Rowan. The RAND Corporation, May 1956. 72pp. 11x8 inches. RARE. No copies located in WorldCat/OCLC $650.00

Perhaps nothing is obvious unless it is established or labeled so; perhaps the obviousness must be stated at least once before it can be officially, recognizably, the case. And perhaps the greater the obviousness is, the more the need to make it officially so. Perhaps nothing is so incredibly obvious that it can be studied and dissected and established.

This seems to be more the case in more recent history than in time more further removed: that millions of dollars can be spent "proving" that children do not like to be separated from their mothers, or that cars will go faster downhill than up, or that people will respond to proper medication better than not, and so on, so on into the night, just seem not to need a vastly-funded proof.

And so the case with nuclear warfare, people, and cities.

In this RAND report from 1956, the great issue seems to be laid to rest, once and for all: the problem with nuclear weapons being exploded in/over cities is that since cities are filled with people, people will be killed. And if those people in the cities are there because of professions that depend on city-settings, then more of those people will be killed than not.


U.S. AIR FORCE
Project RAND
RESEARCH MEMORANDUM

THE CONCENTRATION OF ESSENTIAL PERSONNEL IN AMERICAN CITIES

Margaret Bright Rowan
Takuya Maruyama

Bureau of Applied Social Research
Columbia University

RM-1722

May 1, 1956

This is a working paper. It may be expanded, modified, or withdrawn at any time. The views, conclusions, and recommendations expressed herein do not necessarily reflect the official views or policies of the U. S. Air Force.

The RAND Corporation
SANTA MONICA • CALIFORNIA

But what this report was really about was the unfortunate aspect of the impact if nuclear warfare on leadership and working positions in significant and strategic industrial/business/government professions. And what the report finds is this: since the vast majority of these positions are located in cities (defined as 100,000 population and above), and since cities will be the major targets in a nuclear "exchange", the overwhelming majority of these people will be killed, thus leading to strategic human resource vacancies post-war.

It seems that 95% of aeronautical engineers in the U.S. would be killed in a nuclear war, which I guess would mean that it would be difficult to design new aircraft and such in the post apocalypse world. Of course these people would be killed because it was their industrial base that was being targeted and they were collateral damage, so there wouldn't be any industrial base to produce the components necessary to build, say, a B-52. That part of the equation is not addressed here, though. Nor is there

any sort of recommendation presented to fix the problem.

The RAND document just painfully points out the obvious, once and for all; no one really knew what to do with the information now that it was there, in black and white. Certain people could be evacuated, saved from the maelstrom; but saved for what? There were other evacuation plans that were completely doomed from the beginning, sheltering plans, Dr. Strangelove arrangements, but all of that would come into their pitiful being later on.

First, though, the bitter reality of what everyone already knew--one of the greatest of all obviousnesses–had to be make its appearance in print. And so it did.

The Demography of Nuclear War

Three Reports on Postattack Society, 1966/7

PENDLETON, William H. *A Study of the Demography of Nuclear War.* Human Sciences Research Inc., 1966. 11x8 inches, 103pp, gvc/plastic comb binding. Very good copy. Rare. Surprisingly: WorldCat/OCLC lists no copies.

Offered with:

- *Appendix I, a Study of the Demography of Nuclear War, Empirical Guidelines for the Selection of Demographic Variables and Areal Units for Studying Postattack Society*. By Jeffrey Hadden and Edgar Borgotta. Published by Human Sciences Research Inc. and submitted to the Office of Civil Defense, Postattack Research Division, May 1966 11x8, 16pp. GVC bound, very similar to the preceding.

And offered with:

- PENDLETON. A Second Study of the Demography of Nuclear War. Published by Human Sciences Research Inc, and submitted to the U.S. Army and the Office of Civilian Defense. 11X8", 141, xiiipp. Printed wrappers. Dated August, 1967. WorldCat/OCLC locates 7 copies.

Outside of its statistical foray in survivability and the procreative prospects of the left-overs of vast nuclear exchanges, the

work is a solemn attempt at institutionalizing the death requirements of nuclear combat. The necessity of overwhelming carnage is presented in ironic and underwhelming language, the first bits of which are seen in the conclusion of pamphlet's abstract:

"Cities differ in the kinds and magnitudes of change to which they might be subjected. Considerable variation in the demography of surviving populations can be expected; that variation would be related to policy decisions; and those decisions should therefore be examined for their demographic implications."

Put another way, the city is the main focus of the survivability equations, and the chances of the humans being bombed in those cities would change with—god help us—the amount of bombing.

Cities differ in the kinds and magnitudes of change to which they might be subjected.

This is the key I think to understanding documents like this, making a simple foundation statement so convoluted and tortured that it and most of what follows make any sense outside of restating themselves. Which I guess is a strength.

According to one study [and for the sake of brevity I'm not going to describe the scenarios or data estimation methods and so on] the U.S. would suffer 46% casualties [meaning immediate deaths and not as a result of radiation or illness or starvation or the encyclopedia of whatever that would lead to death somewhere down the road]. The resulting demographic of the "perished" by job description postulates that the most-killed category of worker would be: (#1) aeronautical engineers, 86% dead; (#2) transportation equipment salaried manager, with 79% killed; (#3), social scientists, with 78% of them going down with their clients; (#4), authors, with 76% gone.

Authors? Of what, I wonder? The good ones with the bad? Are authors different from writers? And what do you call folks who produce tv shows? Since the stats here are for 70 cities there's no wonder that there aren't any farmers in this table, as the majority target areas (some 450 cities cited elsewhere as targetable, including my own little burgh of Asheville, N.C.) would naturally have city folk in them. And so I'm guessing that three-quarters of all "authors" in 1960/6 were living in these target cities and were going to go up in smoke. The aeronautical engineers category is more understandable as every one of those industries employing 50 or more people would be a target; frankly I'm surprised that given the possible firepower of the Soviet Union in 1966 that 14% would survive; I'd guess offhand that the number would be 2%.
Even though this stuff is spread out in only 98 pages or so it would keep a person busy segregating the Orwellian gems from those not; it would be a tricky business as most of the "text" in the "not" category would be largely limited to prepositions.

Here's another bit: a parenthetic poke at the post-attack composition of Congress. It is stated that the "postattack" (hyphenated no longer) Congress would be "quite different".It would also be ("in their eyes") "more Conservative than the pre-attack (hyphenated!) Congress. It isn't a cause for great prognostication (?) liberty to assume that the Congress might be more Conservative, but why on Earth did the author qualify the assumption by saying "their eyes"? Pish and posh.

The paper goes on its merry way, connecting the necessaries of Goldbergian delight, and somehow nothing ever happened, which to me is a secret miracle. Especially given the weight of papers like this one, which seems to medicate the effects of war, assuming that there will be a Congress and that people will report back to work once the factories are rebuilt and that there will be more segregation in the colossal world of post-attack America, and on and on into the red dawn.

Mr. Mencken's view of Warren Harding comes to mind when I read this stuff and wonder about how it was that we didn't blow the whole place up:

"I rise to pay my small tribute to Dr. Harding. Setting aside a college professor or two and a half dozen dipsomaniacal newspaper reporters, he takes the first place in my Valhalla of literati. That is to say, he writes the worst English that I have ever encountered. It reminds me of a string of wet sponges; it reminds me of tattered washing on the line; it reminds me of stale bean soup, of college yells, of dogs barking idiotically through endless nights. It is so bad that a sort of grandeur creeps into it. It drags itself out of the dark abyss of pish, and crawls insanely up to the topmost pinnacle of posh. It is rumble and bumble. It is flap and doodle. It is balder and dash."

Notes

1. The abstract from the above paper: "The basic problem with which this report is concerned is that of determining the kinds of demographic change that might result from a range of nuclear attacks, ascertaining the effects of those changes on the future of the surviving populations, and indicating possible areas for Civil Defense action and planning. Earlier studies of the demography of nuclear war were examined and their relevant conclusions and methodology incorporated in the report. A different methodology--expected to be more sensitive to compositional effects--was then designed. The new methodology was tested and found to be more effective than the old. Surviving populations representing a wide range of variation in attack conditions were created on the basis of both old and new methodologies, and the demographic significance of these populations was examined. Assuming a range of post-attack demographic conditions, a series of projections was made on the surviving populations. The demographic significance of the recovering populations was then examined. On the basis of the analysis a series of recommendations relevant to Civil Defense planning was made: Within the framework of this analysis the crucial variable is the demographic pattern of the city. Changes in composition, as well as size, could be of substantial magnitude and would last for generations in some cases. Cities differ in the kinds and magnitudes of change to which they might be subjected. Considerable variation in the demography of surviving populations can be expected; that variation would be related to policy decisions; and those decisions should therefore be examined for their demographic implications."

Casualty Classes Programs//Inventory of the Apocalypse

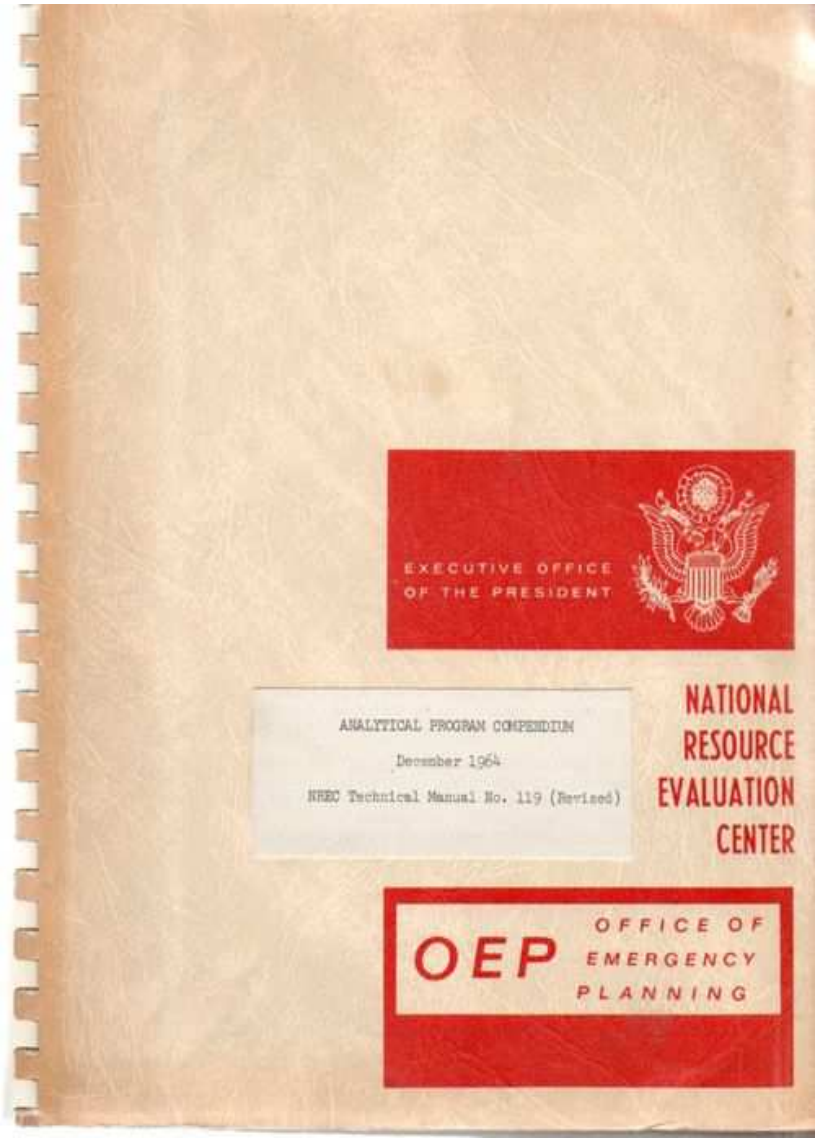
Analytical Program Compendium. NREC Technical Manual No. 119 (Revised), December 1964.

11x8". 92 pp. GVC-bound, with stiff wrappers of the Executive Office of the President NREC/Office of Emergency Planning. [Preface signed by Joseph B. Coker.] Very good condition. $750
WorldCat/OCLC locates 0 print copies

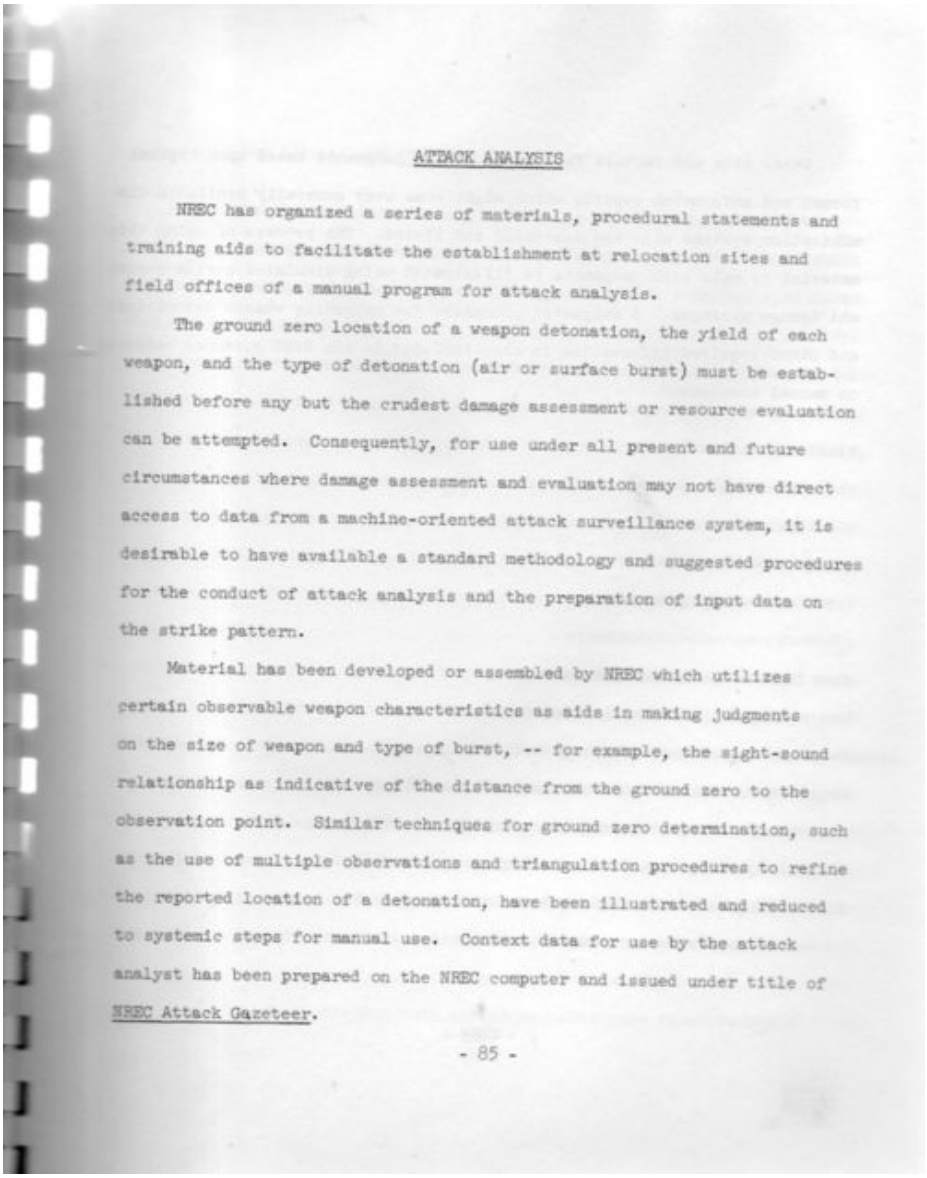
“The Analytical Program Compendium gives a brief description of the National Resource Evaluation Center's current general purpose analytical programs and replaces earlier editions of the NREC Glossary of Damage Assessment Programs. It is intended as a guide for users and potential users of these programs to indicate the various programs that are presently available and those that are being produced. Separate Technical Reports or Technical Manuals are available for the standard operating programs and for a number of those which are in preparation. Reference to these manuals and reports can be obtained in the Bibliography of Publications (Technical Manual No. 121) published by the NREC. The Compendium contains descriptions of the computer programs of a substantive nature.”--From WorldCat abstract via a Google online text.

- Data processing and computer service routines have been omitted; for example, there are a number of routines available such as Conversion of UTM Coordinates to GP Coordinates, data handling, and editing routines which are necessary to a number of these substantive programs.

Preface signed by Joseph D. Coker, Chief, National resource Evaluation Center, who writes: "The Analytical Program Compendium gives a brief description of the National Resource Evaluation Center's current general purpose analytical programs and replaces earlier editions of the NREC Glossary of Damage Assessment Programs. It is intended as a guide for users and potential users of these programs to indicate the various programs that are presently available and those that are being produced. Separate Technical Reports or Technical Manuals are available for the standard operating programs and for a number of those which are in preparation. Reference to these manuals and reports can be obtained in the Bibliography of Publications (Technical Manual No. 121) published by the NREC. The Compendium contains descriptions of the computer programs of a substantive nature."



- The NREC and the Office of Civil Defense used the UNIVAC scientific programs USE assembly language and 3600 Fortran.
- The last section describes programs of manual damage assessment ("developed by agency representatives for use when computer estimates are not available").
- The list of the contents of the 92-page work is pretty interesting, the book presented in eight sections (or "casualty classes programs"): (I) Attack Analysis Programs; (II) Vulnerability Analysis Programs; (III) Damage Assessment Programs (Direct Effects, sections dedicated to nuclear shots Dusty III, Flame I, Jumbo III, Streak IV, Dart II, Dart III, Picnic, Ready I.(IV) Resource Evaluation Programs; (V) Economic Analysis Programs ; (VI) Resource Management Programs; (VII) Mapping and Display; (VIII) Manual Procedures for Damage Assessment and Resource Evaluation.



ATTACK ANALYSIS

NREC has organized a series of materials, procedural statements and training aids to facilitate the establishment at relocation sites and field offices of a manual program for attack analysis.

The ground zero location of a weapon detonation, the yield of each weapon, and the type of detonation (air or surface burst) must be established before any but the crudest damage assessment or resource evaluation can be attempted. Consequently, for use under all present and future circumstances where damage assessment and evaluation may not have direct access to data from a machine-oriented attack surveillance system, it is desirable to have available a standard methodology and suggested procedures for the conduct of attack analysis and the preparation of input data on the strike pattern.

Material has been developed or assembled by NREC which utilizes certain observable weapon characteristics as aids in making judgments on the size of weapon and type of burst, -- for example, the sight-sound relationship as indicative of the distance from the ground zero to the observation point. Similar techniques for ground zero determination, such as the use of multiple observations and triangulation procedures to refine the reported location of a detonation, have been illustrated and reduced to systemic steps for manual use. Context data for use by the attack analyst has been prepared on the NREC computer and issued under title of NREC Attack Gazeteer.

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Under section III are described the various other programs computing availability of surviving resources and damages to the rest, and to assess capability and loss. For example: Weapons Edit III (working on an 1103 AS or 1105 computer) calculates missile availability; Dusty III (fallout intensity "...at weapon oriented points"; Flame I ("computes an estimate of the extent of the spread of uncontrolled fire") and can compute fire maps; Jumbo III (a casualty assessment program); Attack Environment III ("determines the blast effect from the dominant weapon and combines the separate effects of fallout and from from all weapons that affect each resource point"); Facility Assessment (Namepoint) III (for physical damage to facilities); Time-Phased Accessibility ("listing of accessibility of resources in various conditions of damage after an attack"); Population III (summing up casualties in

populations after attack; Manpower III (translating population losses into labor losses and how it would affect x,y, and z); Livestock III (keeping tabs on livestock "and livestock products"); Streak IV ('high speed estimate of blast and fallout casualties, estimates of damage and denial of facilities..."); Picnic (!, estimating casualties from biological or chemical weapons), and a number of other programs.

There are some other interesting programs for end game times: Net Inventory ("(a) routine (that) is a balance sheet between supply (inventory and production) and demands (requirements)" and Amounts of Production ("a routine (showing) the production based in facility damage and labor casualties; and of course Survival II, which computes "the total requirements...for regions".

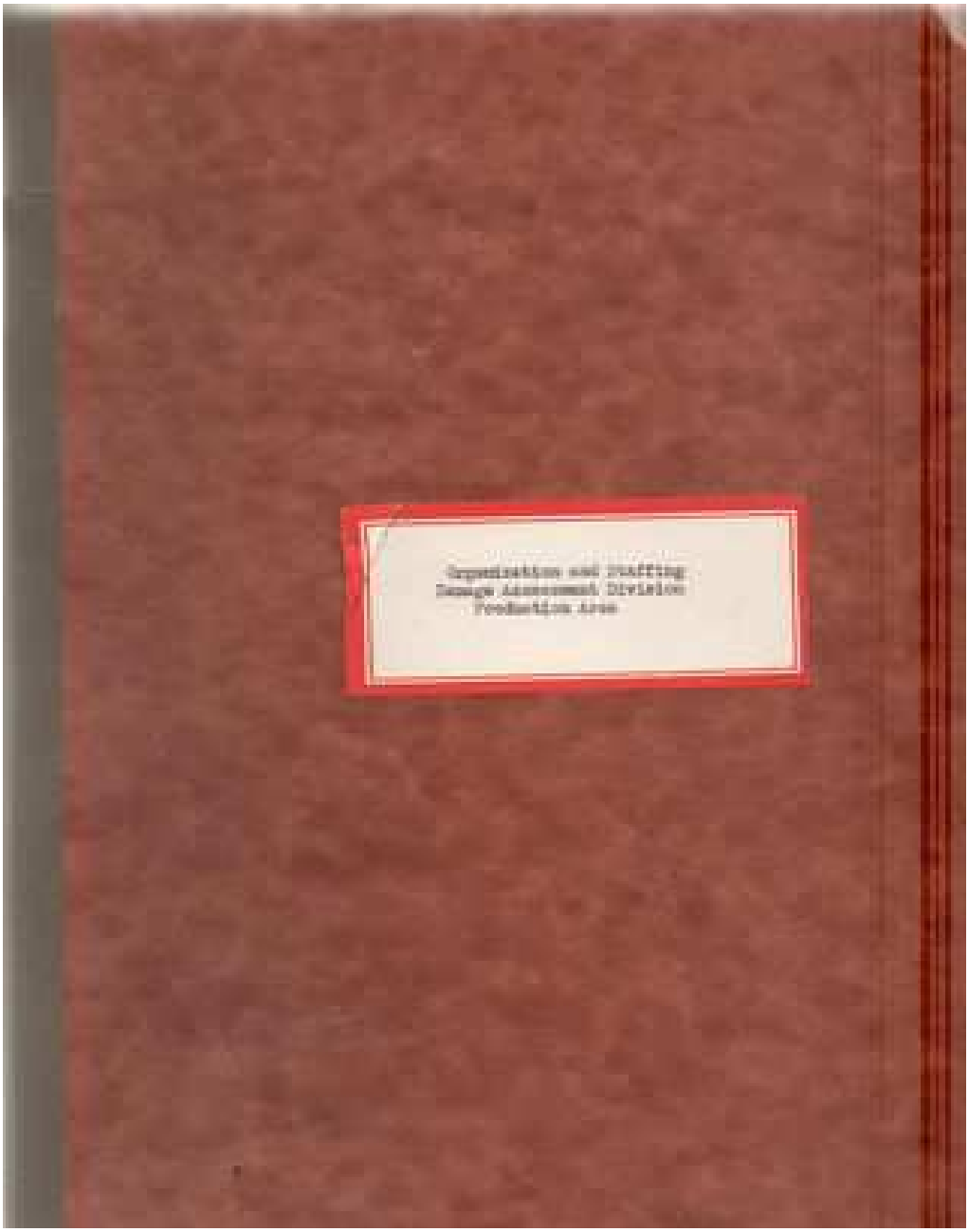
Of course it was necessary to figure all of this stuff out so that in the event of The Big One there is a certain control over what is where and what is left and what is needed and so on.

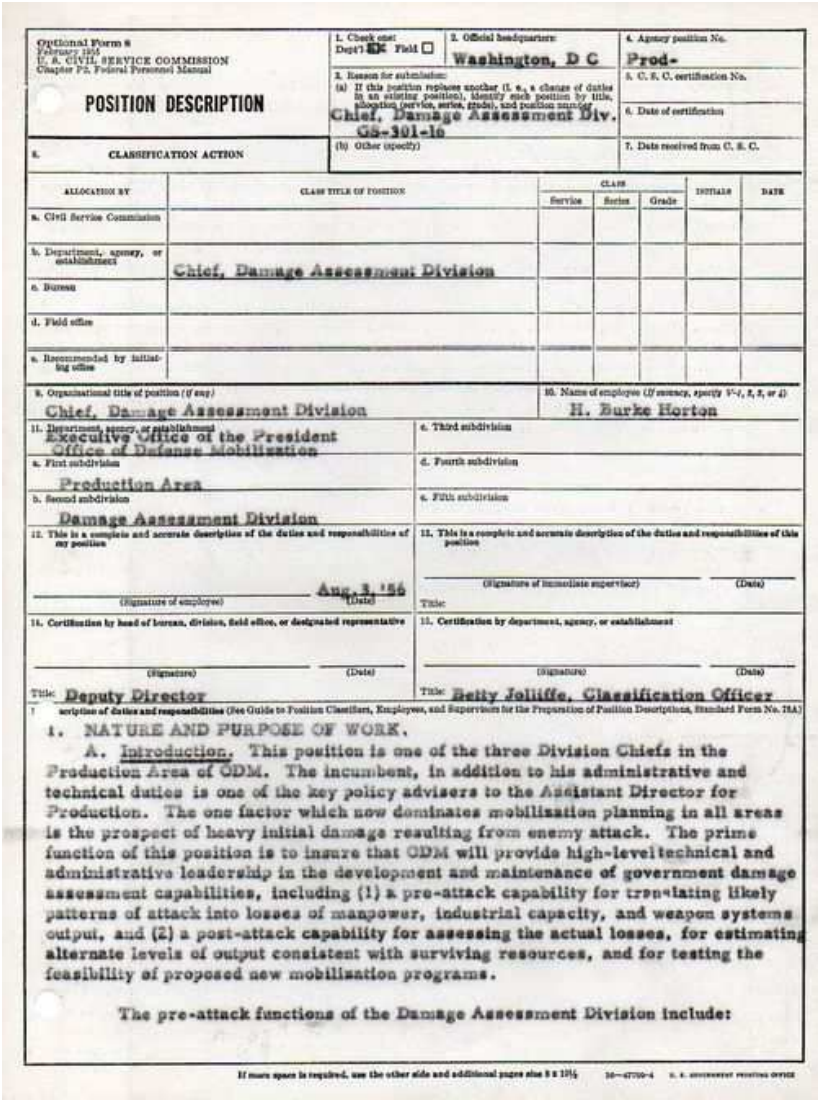
There is no mention made to where these computers are housed.

Rare Document on Post-Attack Assessment

Organization and Staffing/Damage Assessment Division/Production Area. Carbon-paper copy of Organization and Staffing Damage Assessment Division Production Area. August, 1956. 8x10. 25pp. Printed on thin, onion-skin like paper. Contents Very Fine; original manila folder wrappers in Fine condition. $1250

I've written many times on the technical and political end of the creation and deployment of the atomic bomb, along with some posts on the use and manipulation of language in controlling the sense impressions of nuclear war and survivability. What I have found so extraordinary about this second part is the creation of ordinariness, or mechanization, or acceptance, of the aftermath of nuclear warfare--and what we're talking about here is the
"exchange" of not just a few 20 kiloton Hiroshima-type weapons, but thousands of megatons of explosives and massive amounts of radiation.





Optional Form 8
February 1955
U. S. CIVIL SERVICE COMMISSION
Chapter P2, Federal Personnel Manual

POSITION DESCRIPTION

1. Check one: Dept'l ☒ Field ☐
2. Official headquarters: Washington, D C
3. Reason for submission: (a) If this position replaces another (i. e., a change of duties in an existing position), identify such position by title, allocation (service, series, grade), and position number: Chief, Damage Assessment Div. GS-301-16 (b) Other (specify)
4. Agency position No.: Prod-
5. C. S. C. certification No.
6. Date of certification
7. Date received from C. S. C.
8. CLASSIFICATION ACTION

ALLOCATION BY	CLASS TITLE OF POSITION	CLASS: Service	Series	Grade	INITIALS	DATE
a. Civil Service Commission						
b. Department, agency, or establishment	Chief, Damage Assessment Division					
c. Bureau						
d. Field office						
e. Recommended by initiating office						

9. Organizational title of position (if any): Chief, Damage Assessment Division
10. Name of employee (If vacancy, specify V-1, 2, 3, or 4): H. Burke Horton
11. Department, agency, or establishment: Executive Office of the President, Office of Defense Mobilization
a. First subdivision: Production Area
b. Second subdivision: Damage Assessment Division
c. Third subdivision
d. Fourth subdivision
e. Fifth subdivision
12. This is a complete and accurate description of the duties and responsibilities of my position: (Signature of employee) Aug. 3, '56 (Date)
13. This is a complete and accurate description of the duties and responsibilities of this position: (Signature of immediate supervisor) (Date) Title:
14. Certification by head of bureau, division, field office, or designated representative: (Signature) (Date) Title: Deputy Director
15. Certification by department, agency, or establishment: (Signature) (Date) Title: Betty Jolliffe, Classification Officer

scription of duties and responsibilities (See Guide to Position Classifiers, Employees, and Supervisors for the Preparation of Position Descriptions, Standard Form No. 78A)

1. NATURE AND PURPOSE OF WORK.

A. Introduction. This position is one of the three Division Chiefs in the Production Area of ODM. The incumbent, in addition to his administrative and technical duties is one of the key policy advisers to the Assistant Director for Production. The one factor which now dominates mobilization planning in all areas is the prospect of heavy initial damage resulting from enemy attack. The prime function of this position is to insure that ODM will provide high-level technical and administrative leadership in the development and maintenance of government damage assessment capabilities, including (1) a pre-attack capability for translating likely patterns of attack into losses of manpower, industrial capacity, and weapon systems output, and (2) a post-attack capability for assessing the actual losses, for estimating alternate levels of output consistent with surviving resources, and for testing the feasibility of proposed new mobilization programs.

The pre-attack functions of the Damage Assessment Division include:

If more space is required, use the other side and additional pages size 8 x 10½

Yes. Well. All things being equal, such things as an Afterlife in the United States needed to be contemplated because that is what we do--we make the situation possible for end-of-the-world stuff to happen, and so we have to plan for building things up again with radioactive detritus once all of the keys get turned and buttons pushed, as it is just a natural course of that historical river. That the bomb would be built was a given; that the Soviets would develop the a bomb and delivery capacities was just a matter of time, and that they would be our sworn death-enemies was also a fait accompli. To develop a way to somehow survive a nuclear war may have been a major deterrent to not launching an attack, especially when linked with a Mutually Assured Destruction (MAD) arms build up (where everyone and everything would be obliterated if there was a nuclear war, or at least so by 1965 (and probably earlier than that). All this insane stuff may have worked, and somehow we managed not to ignite the

world, because (to paraphrase Frank Zappa) there would be no real estate left.

On the other hand, building all of these weapon systems and planning for attack and the post attack world could have pushed us into a final confrontation, making all of this sound "winable", "doable" somehow, that once the bombs had all exploded and nothing worked anymore, that there would be enough to pull together of our civilization to declare that we had indeed "won'".

And the only way to declare a winner was to have something to stand on besides pieces of green glass and Earth, and so plans for communications and a military, police force, fire brigades, medical care, food distribution, banking, and all the rest--the pieces of a recognizable backbone of American society--would have to be undertaken. All of this could very well accomplish the creation of an illusion in the mind of the adversary that you are capable of surviving a nuclear war, and so there would be no great gain in attacking; or it could send the message that by doing this preparation that you were preparing a first strike scenario, and so the adversary would attack while the odds were still not horribly out of balance. And on and--it all looks like a lose-lose endgame to me, which is hardly a "game" at all when all players are losers.

But still there was a need to staff the thousands of positions that went into the theoretical end of figuring out the non-weapon-end world after nuclear war, and the above "position description" is an example of that, a necessarily pro forma form, just another job in a ea of jobs. This one's job descriptions read like any other, except of course that the content was much different. Form the same, sentence structure the same, vocabulary basically invariable.

This position description was for "Chief, Damage Assessment Division", was was the part of the Office of Emergency Preparedness (which operated under the auspices of the Executive Office of the President, and then under the Office of Defense Mobilization (ODM), and then under the Production Area, and then, finally, the Damage Assessment Division DMA). The job of the DMA was to identify what would happen to the essential production facilities that would keep the country going--industrial, technical, medical, biological, and so on--how they would be targeted, and how they might survive an attack. This also applied to the people who would be required to be in charge of all of this. Damage assessment.

It was also the job of this person to coordinate the estimation of damage and assessment business post-attack.

The position description clearly makes distinctions between pre- and post-attack responsibilities of the Chief of the Damage Assessment Division: under "Nature of Purpose of Work", part 1, section A (1) it

reads "a pre-attack capability for translating likely patterns of attacks into losses of manpower, industrial capacity, and weapon systems output'. In Section A (2) we see"a post-attack capability for assessing actual losses, for alternating alternate levels of output consistent with surviving resources and for testing feasibility of proposed new mobilization programs". Or in other words, sifting the rubble to see who and what was left and to see where they could be actually plugged into whatever scenarios had already been planned, and alter as necessary. And also on page two, part (3) "development and maintenance of capabilities for both rapid and deliberate damage assessments in event of actual attack..."

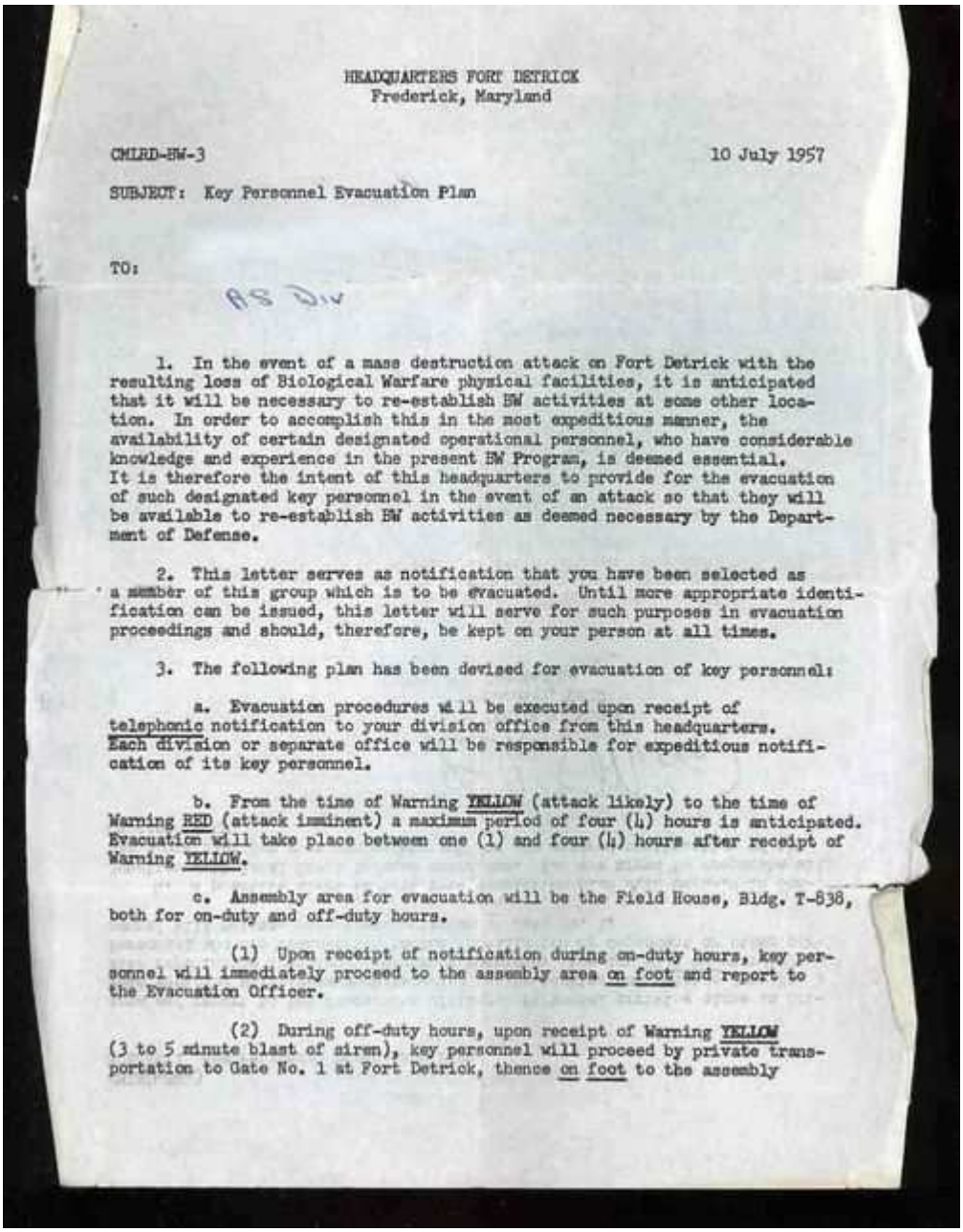
Continuing on page two, the Damage Assessment Division would create damage estimates, "disseminate ...estimates of indirect effects including effects...on government, financial and credit systems, and production..." which of course is, well, everything. Except overall assessments of total numbers of people killed, which isn't a necessary statistic for most of the stuff we're talking about here.

There was much else in this job description, which is five pages long. It is quite fascinating, seeing all of this spelled out so clearly, written on the end pages of our national book of life.

On the other hand, I'm not exactly sure what else everybody else could've done, all other things being equal.

Two Minutes to Doomsday: "Get out of Hell Free" Card, 1957.

Armageddon and All That...



HEADQUARTERS FORT DETRICK
Frederick, Maryland

CMLRD-BW-3 10 July 1957

SUBJECT: Key Personnel Evacuation Plan

TO:

AS Div

1. In the event of a mass destruction attack on Fort Detrick with the resulting loss of Biological Warfare physical facilities, it is anticipated that it will be necessary to re-establish BW activities at some other location. In order to accomplish this in the most expeditious manner, the availability of certain designated operational personnel, who have considerable knowledge and experience in the present BW Program, is deemed essential. It is therefore the intent of this headquarters to provide for the evacuation of such designated key personnel in the event of an attack so that they will be available to re-establish BW activities as deemed necessary by the Department of Defense.

2. This letter serves as notification that you have been selected as a member of this group which is to be evacuated. Until more appropriate identification can be issued, this letter will serve for such purposes in evacuation proceedings and should, therefore, be kept on your person at all times.

3. The following plan has been devised for evacuation of key personnel:

a. Evacuation procedures will be executed upon receipt of telephonic notification to your division office from this headquarters. Each division or separate office will be responsible for expeditious notification of its key personnel.

b. From the time of Warning YELLOW (attack likely) to the time of Warning RED (attack imminent) a maximum period of four (4) hours is anticipated. Evacuation will take place between one (1) and four (4) hours after receipt of Warning YELLOW.

c. Assembly area for evacuation will be the Field House, Bldg. T-838, both for on-duty and off-duty hours.

(1) Upon receipt of notification during on-duty hours, key personnel will immediately proceed to the assembly area on foot and report to the Evacuation Officer.

(2) During off-duty hours, upon receipt of Warning YELLOW (3 to 5 minute blast of siren), key personnel will proceed by private transportation to Gate No. 1 at Fort Detrick, thence on foot to the assembly

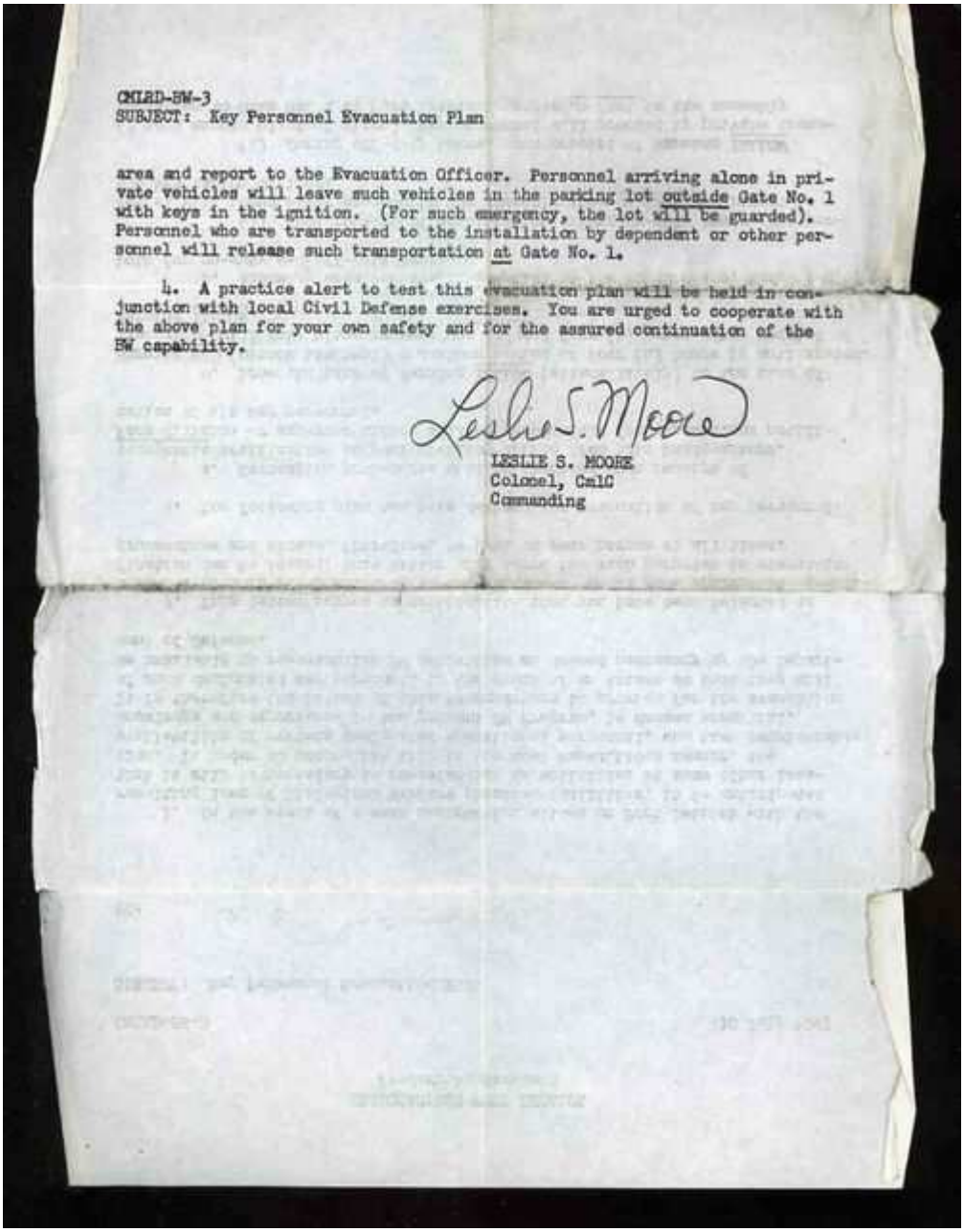
This letter, written in 1957 by Colonel Leslie S. Moore of the U.S. Biological Weapons Program at Fort Detrick, Maryland, to a member (whose name I've removed) of the A.S. "(Atmospheric Sciences") division, was basically a get-out-of-hell-free card for its bearer in the case of devastating nuclear attack.

"In the event of a mass destruction attack on Fort Detrick with the resulting loss of Biological Warfare physical facilities, it is anticipated that it will be necessary to re-establish the BW activities at some other location."

"In order to accomplish this in the most expeditious manner, the availability of certain designated personnel...is deemed essential."

The "letter serves as notification that you have been selected as a member of this group which is to be evacuated" to get the biological weapons program up and running again. As you can read in the clickable version of the document, there are directions about what top do and when to do it. There is no mention of family. My read is that this is Endgame stuff, end of civilization as we know it, and that this was the Darwinian sweep of necessary people. Or is it Dr. Strangeloveian? I get the two confused.

Suffice to say that Fort Detrick, which had been established in 1943 (constructing and delivering anthrax bombs by 1944) as Camp Detrick, already had a fairly full career before it was up-named to "Fort" in 1956. It was the recognized home/collecting node for the American Chemical and Biological Weapons programs until Richard Nixon, of all people, disbanded that capacity at Detrick in 1969.



CMLRD-BW-3
SUBJECT: Key Personnel Evacuation Plan

area and report to the Evacuation Officer. Personnel arriving alone in private vehicles will leave such vehicles in the parking lot outside Gate No. 1 with keys in the ignition. (For such emergency, the lot will be guarded). Personnel who are transported to the installation by dependent or other personnel will release such transportation at Gate No. 1.

4. A practice alert to test this evacuation plan will be held in conjunction with local Civil Defense exercises. You are urged to cooperate with the above plan for your own safety and for the assured continuation of the BW capability.

Leslie S. Moore

LESLIE S. MOORE
Colonel, CmlC
Commanding

It is interesting to note that the person to whom this letter was addressed was actually in aerolized particle release, and at the time, in 1957, was working on Operation Large Area Concept, which simulated and studies a very large airborne attack over thousands of mile of land. It was an obvious two-sided study about how-to and how-to react to a mass scale biological attack.

1957 was about the height of the Cold War. According to the ticking Doomsday Clock of the venerable Bulletin of the Atomic Scientists, the minutes-to-midnight--with the stroke of midnight being the Big One, the ultimate attack, the carnal release of all nuclear power, The End--was set at about two (two

minutes to midnight) from 1953 to 1960. The clock admittedly was set very close to that mark anyway, starting out life at seven minutes to midnight in 1947, but it was probably accurate at how close we all were, our toes stuffed into Stanley Kubrick's Dr. Strangelove's bitterly polished shoes, to walking (finally!) towards the explosive closing roll of the movie.

I might have been overstating the "Get out of Hell Free" aspect of this letter. Probably it was a "Survive Many Aspects of Hell at Not-Understandable Personal and Societal Costs" card , but it doesn't have the snap of the former, though it is more factual.

The letter tells the recipient to keep it on his person at all times for use in an emergency. I don't think you'd need to be told that twice.

Document: 11x8.5", printed front and back. Rare. $1000

The Bomb Damage Problem, 1954

The Bomb Damage Problem, AFAPA-4-4, published in 1954 by the Directorate of Management Analysis (DCS/Comptroller at the Headquarters of the U.S. Air Force). 11x8 inches. GVC binding. 22pp. Very good condition. RARE. No copies located in WorldCat. $500

The spoiler answer to this: make sure to account for the nukes dropped on you when figuring out what you've got left to work with.

This seems a tautologically tongue-twisting, not-quite-right title for this post, and indeed it might be. But that's the way the pamphlet I'm reporting on read, a sometimes resilient-to- inspection rubberie beastie whose basis for being written was to report on an great oversight that doesn't really want to be recognized, even if it is the title of the work.

The Bomb Damage Problem, AFAPA-4-4, published in 1954 by the Directorate of Management Analysis (DCS/Comptroller at the Headquarters of the U.S. Air Force) is a pamphlet of discovery–or rather, the discovery of the lack of discovery.

The work is an introduction to some aspects of nuclear exchange post-attack predictive capacity–particularly with the ability of American industry "to support a war plan".

The anonymous pamphlet gets straight away to the discovery part–that previous predictions of post-attack capacity were "probably completely unrealistic" because "[they] did not take account of the likely bomb damage to the U.S. production facilities".

I would think that even at this relatively early point of planning for possible Soviet nuclear attack that war game scenarios would have taken bomb damage to industry a"and accompanying manpower losses" into account of how the war machine would react after the bombs began to explode. Though it seems not. I've looked to see how I could be misreading this thing because it seems like too monumental an oversight to make. But I can't find where I'm making my interpretative mistake.

Ultimately the authors focuses on saving the corpus of the overall works, saying that this oversight does not damage the "important thinking" that had gone on it spite of this error.

The word "error: is not used in the text of course. This is how it is described: "In connection with this critical new obstacle to intelligent military planning, it is essential that speculation be minimized." The error is actually redefined as a "critical new obstacle" the effect of which heightens "speculation". Which is all true.

I suppose what is really going on his the formation of some bedrock stuff formulating information gathering for creating a computer program for deeper analytical study of the effects of nuke warfare on post-attack industry. 1954 is about right for the time for this to happen, and the DMA–as the home for the creation of linear programming among countless other things–would've been the place for this work to happen.

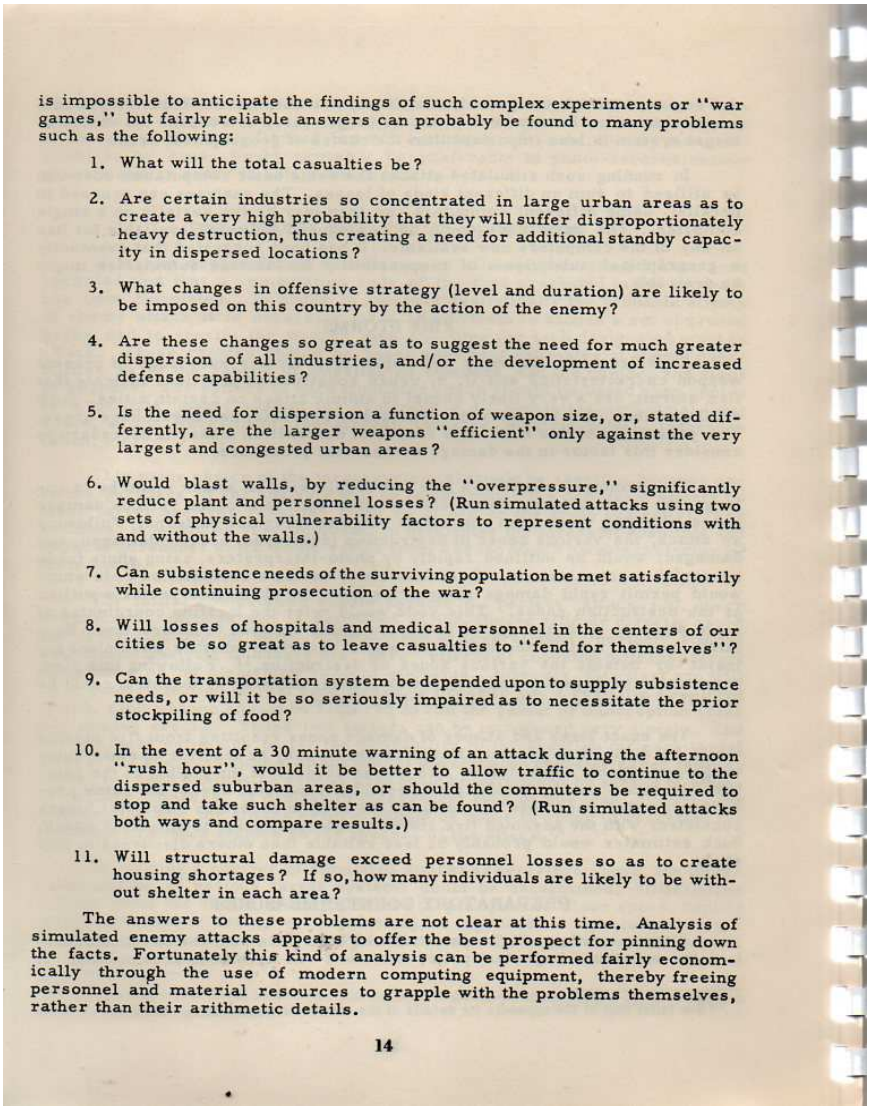
But I keep coming back to what seem to be enormous understatements–even giving plenty of allowance for the time–that keep cropping up in the pamphlet. Perhaps it is just stating the obvious for the first time that makes all of these seem so potentially underwhelming, like this nugget: "numerous measures of the importance of each target may eventually be needed...." (Page 7).

There's plenty of more detail though that occurs in the pamphlet, as in figuring out damage to structures by the yield of the explosion and distance from the target and the composition of the target's structure, and so on.

And then we get back to the obvious: "the principal effect of a fire storm following an attack would be to enlarge the area of destruction and to alter the shape of the various damage zones, changing them from concentric rings to irregular patterns. ". As I said, maybe it is just a case of a "Call me Ishmael", or stating that lines and points in space exist for the purpose of geometry. Still, it rubs me the wrong way, all over.

And just to make this point perfectly clear: the "bomb damage" problem is to take into account bomb

damage to U.S. war-making, bomb-producing capacity, in a sort of BIBO (bomb in, bomb out) version of a SISO (shit in, shit out).



is impossible to anticipate the findings of such complex experiments or "war games," but fairly reliable answers can probably be found to many problems such as the following:

1. What will the total casualties be?
2. Are certain industries so concentrated in large urban areas as to create a very high probability that they will suffer disproportionately heavy destruction, thus creating a need for additional standby capacity in dispersed locations?
3. What changes in offensive strategy (level and duration) are likely to be imposed on this country by the action of the enemy?
4. Are these changes so great as to suggest the need for much greater dispersion of all industries, and/or the development of increased defense capabilities?
5. Is the need for dispersion a function of weapon size, or, stated differently, are the larger weapons "efficient" only against the very largest and congested urban areas?
6. Would blast walls, by reducing the "overpressure," significantly reduce plant and personnel losses? (Run simulated attacks using two sets of physical vulnerability factors to represent conditions with and without the walls.)
7. Can subsistence needs of the surviving population be met satisfactorily while continuing prosecution of the war?
8. Will losses of hospitals and medical personnel in the centers of our cities be so great as to leave casualties to "fend for themselves"?
9. Can the transportation system be depended upon to supply subsistence needs, or will it be so seriously impaired as to necessitate the prior stockpiling of food?
10. In the event of a 30 minute warning of an attack during the afternoon "rush hour", would it be better to allow traffic to continue to the dispersed suburban areas, or should the commuters be required to stop and take such shelter as can be found? (Run simulated attacks both ways and compare results.)
11. Will structural damage exceed personnel losses so as to create housing shortages? If so, how many individuals are likely to be without shelter in each area?

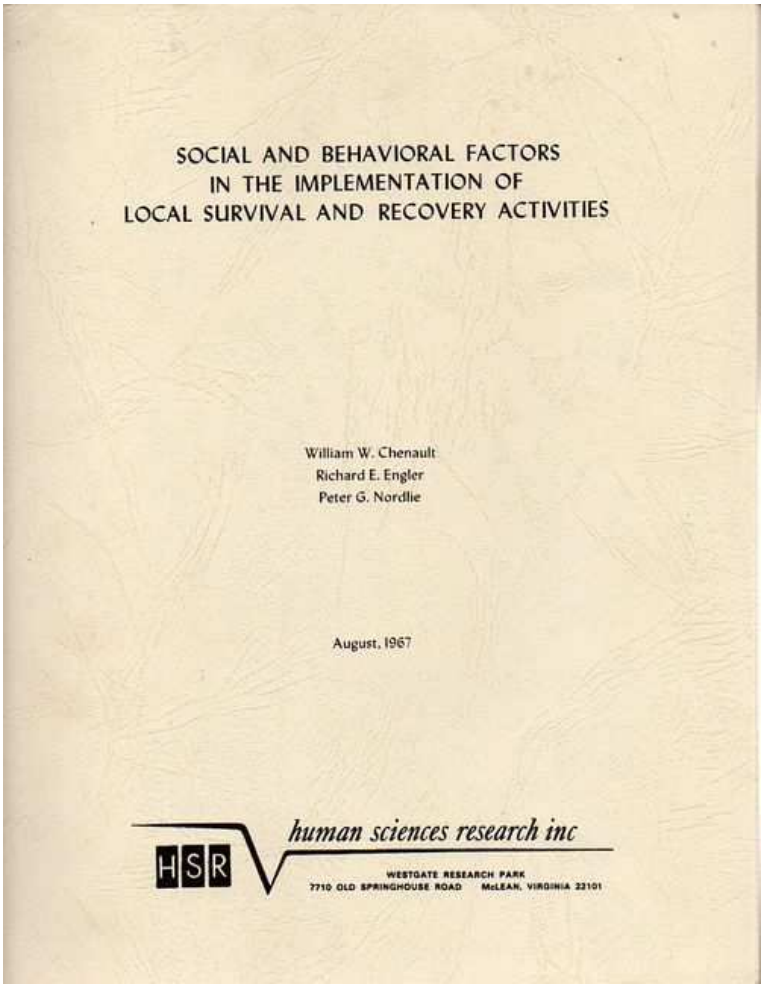
The answers to these problems are not clear at this time. Analysis of simulated enemy attacks appears to offer the best prospect for pinning down the facts. Fortunately this kind of analysis can be performed fairly economically through the use of modern computing equipment, thereby freeing personnel and material resources to grapple with the problems themselves, rather than their arithmetic details.

14

Social and Behavioral Factors in the Implementation of Local Survival and Recovery Activities. William Chenault, Richard Engler and Peter G. Nordhie in August 1967. Published by Human Sciences Research, Inc., of McLean,Virginia. 11x8 87pp+xiipp+3pp. Fine condition. WorldCat/OCLC locate 5 copies $350

In the entirety of the text of Social and Behavioral Factors in the Implementation of Local Survival and Recovery Activities (written by William Chenault, Richard Engler and Peter G. Nordhie in August

1967) there is little evidence that its authors fought to rid themselves of their Thesaurus of Obfuscation. A dissected version of their effort would've made for good, clean fun, adding their bits to a Menckenian database of extraordinarily-written governmentese, but since all of this involved surviving thermonuclear war, the "fun" part is obliterated. What, exactly, was it that the authors were trying to accomplish? Perhaps in all of it they weren't constructing anything devious at all--perhaps their incredible assault on meaning was simply written in a language understood by their audience. That, or they really didn't intend to have heard what they were trying to say,, if there was anything that was being said at all.


SOCIAL AND BEHAVIORAL FACTORS
IN THE IMPLEMENTATION OF
LOCAL SURVIVAL AND RECOVERY ACTIVITIES

William W. Chenault
Richard E. Engler
Peter G. Nordlie

August, 1967

HSR human sciences research inc
WESTGATE RESEARCH PARK
7710 OLD SPRINGHOUSE ROAD McLEAN, VIRGINIA 22101

The baseline to this pamphlet is this: that in a post-thermonuclear war United States there will be survivors; the survivors will have "hardships", but the hardships will be overcome; the key issue is to get survivors to work together to put the country back on its feet militarily and economically; survivors will need "incentives" to work together; the strong will survive, and others will have to be thrown under the bus. There will be worries about compensation for destroyed property, shipping schedules, trust in money, and a certain amount of debt forgiveness. There will be tax--sales tax.

There is no mention of the amount of death or the continuation of the dying in the year or two post-attack, but there is a graph, and the graphs not pretty. It doesn't get very much mention.

"...communities of [nuclear] disaster struck individuals need to define their needs and activities in the immediate context of the community". pg. 5.

"The tendency of nuclear disaster is to isolate communities.." pg 6

I've written often on this blog[1] about spectacularly bad thinking in planning for post-Apocalypse thermonuclear war America, mostly on government/agency reports that write about the impossible being done by survivors in impossible ways, painting the specter of impossibility and liquid death in turgid, unprovable prose.

This study reports of the ways in which American society can survive and rebuild following a devastating nuclear/thermonuclear war. The authors list five consequences of "severe attack":

#1. Tremendous destruction of property...

#2. Disruption of transportation and shortage of fuel for motive power together with an associated disruption of regional specialization and significant breaks in geographical continuity.

#3. Drastic reorientation of effective economic demand"

#4 . General disruptions of normal interindustry flows

#5. Shortages of technical and professional manpower in some fields.

I particularly like #3. Also the use of words like "shortages" and "disruption". And why they stopped there I really don't know.

Much of the report is an examination of how to get the surviving elements of society back on its feet via carrot-and-stick methods, coaxing people into working together, with the eventual goal of restructuring the country, building America back again, observing capitalism, the tax codes, exchanging labor exchange units for goods and services.

"Personal and group motivations would continue to be related to economic organization and production as they are in the preattack society" (pg 1)

"It follows that the nature and direction of many recovery activities will be determined by national, not local, requirements" (pg 3)

"Individuals must be motivated to implement policies and perform activities dictated by national economic interests". (pg 4)

It is assumed that the character of the post-attack country would be pretty much the same as it was before thermonuclear war, and that we all want to return there. The report states that one of the most important elements of that society is the military and its capacity to protect people and industry. Therefore the survivors of nuclear war must be induced to work on a national scale to maintain the military and thus the stability of whatever was left of society, in spite of the fact that "in the heaviest attack, the loss of familiar landmarks, relationships and dependencies would be unsettling to survivors". (I'm not sure what "dependencies" relates to, whether they are child or the need for pharmaceuticals or the need to watch the news on television. This is unclear.)

Generally, there are a host of activities suggested to compel compliance, depending on where a community is in a 9-part destruction grid. There are incentives like food and water, medical treatment, and of course loan forgiveness. These inducements must be considered because enforcing compliance militarily is not an option, as the report states:

"It is doubtful whether a very widespread employment of a force to secure participation in recovery activities is feasible" (pg 7)

Meaning I guess that the U.S. Armed Forces will no the enforcing mandatory compliance schedules for recovery—or at least they weren't writing about it "pre-attack".

But the authors clearly assume that there will be something approximately pre-attack life in the post-attack world. Amidst the horror and chaos, we read that

"Businessmen, in particular, but others as well, would experience disturbing and subtle changes in familiar institutions and in such bases of mutual trust as methods of establishing or verifying credit...or estimating delivery dates"--pg 11.

"Disturbing and subtle" changes to delivery, indeed.

We further read of "widespread readjustments of status, status symbols, and values" (page 11) which no doubt would come if all of your possessions were burned up, or lost or destroyed in some way, along with the owner. It is definitely difficult to maintain status relationships in the evidence of no status and no relationships. Of course this whole deal is complicated by the issue that status symbols are also relationships and associations, much of which could also be gone in the same fire cloud.

If your valuables and house and such weren't destroyed, then you were expected to go out and work for the community, and not spend your time inside your house protecting it from people who didn't have anything. This issue is sort of addressed here:

"Measures for the control of displaced persons, obviating the necessity of individuals devoting their

time to the protection of their homes, represent one form of indirect influence on the motivation of potential workers to abandon maintenance activities." (pg 50).

Which means, I think, that there will be some sort of control or protection so that people don't need to spend their time securing their possessions.

But the thing that will make people work for the greater good, the compliance with the orders of rebuilding the country, will be "economic incentives...or a penalty for non participation)". Payment would be made with money or food. The next incentive: housing, or "more desirable dwelling places for those participating in recovery activities". It remained to be seen though in this report what it was specifically that represented "recovery activities" or how the compensation per work bit was handed out.

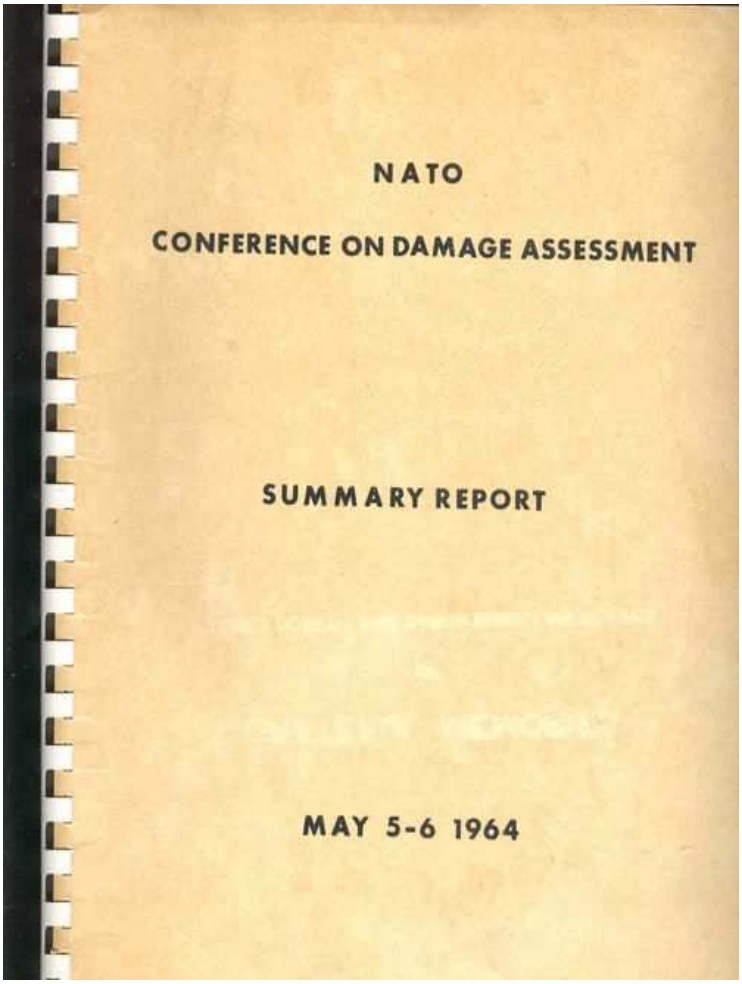
One way to raise the necessary capital to fund this post-attack world was through taxes, "a structure of indirect taxes could be developed, with higher rates applied to non-essential goods". (pg 53). On the other hand, just a few paragraphs later, the authors discuss getting rid of an income tax in favor of direct taxes, which means that taxes survive the atomic nightmare.

This continues on and on, a cascade of some wincing ideas tumbling over themselves, settling into a confusing mist of wording and logic that is difficult to translate. Perhaps that was the intention. Perhaps not. There's not much left in the bottom of a smoking, radioactive hole, except for smoke and radiation.

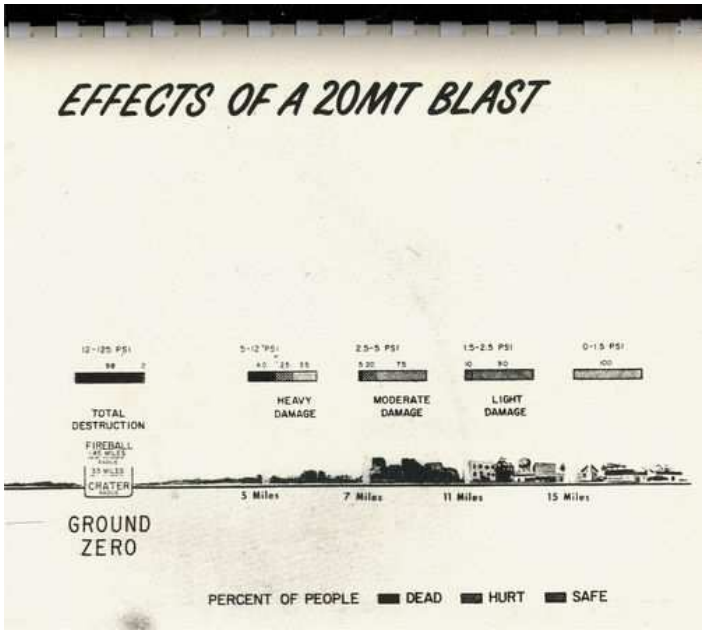
Lastly, I wonder why “post-attack” is hyphenated in these reports and “preattack” isn't?

"…our choice of path may be delayed too long… " Dante, Divine Comedy, Inferno, Canto XII, line XIII, 2nd level of Hell (envy).

The NATO Conference on Damage Assessment Summary Report (May 5-6, 1964) was not one written for its outcome, necessarily, but the means of getting there. The outcomes were highly differentiated levels of sameness, a strategic tour of Dante's creation cataloging the layers of deep destruction like hose of his funneling pit.

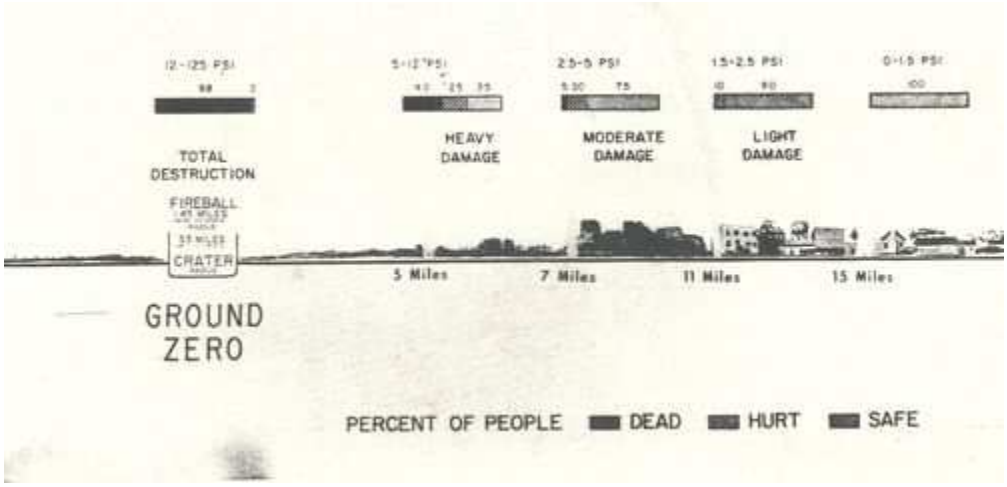


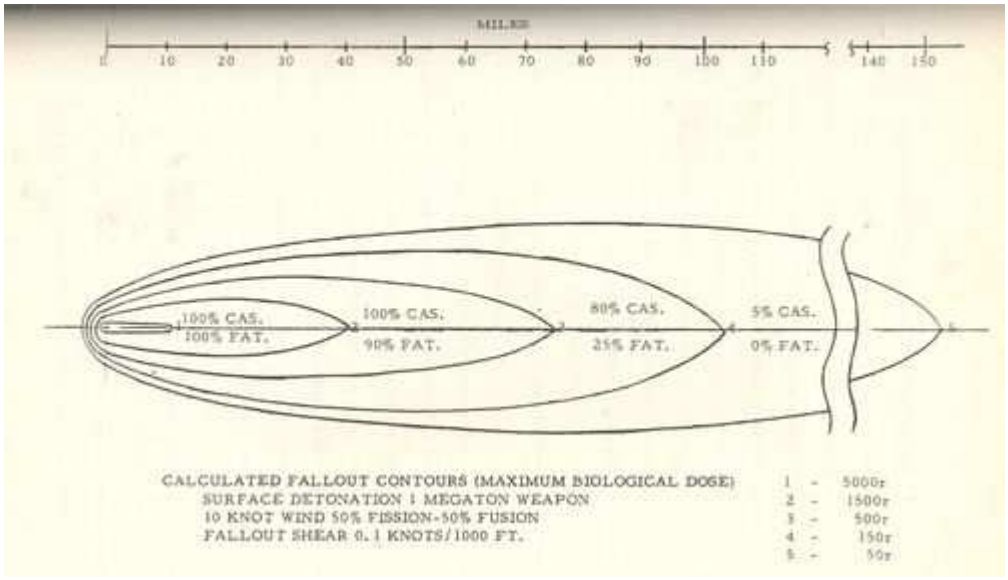
Professionally the paper dealt with several different ways of computing nuclear exchange scenarios (given names of understated inelegance like Jumbo, Brisk, Frisky, Dart and Dusk) with lots of smokily mirrored hocus pocus, the necessary ingredient of the philosophical technology of Mutually Assured Destruction. MAD. Somehow it all worked out without any exchange ever happening. (The principal contributor here was James Coker, chief of the National Resource Evaluation Center, Office of Emergency Planning, Executive off of the President.)



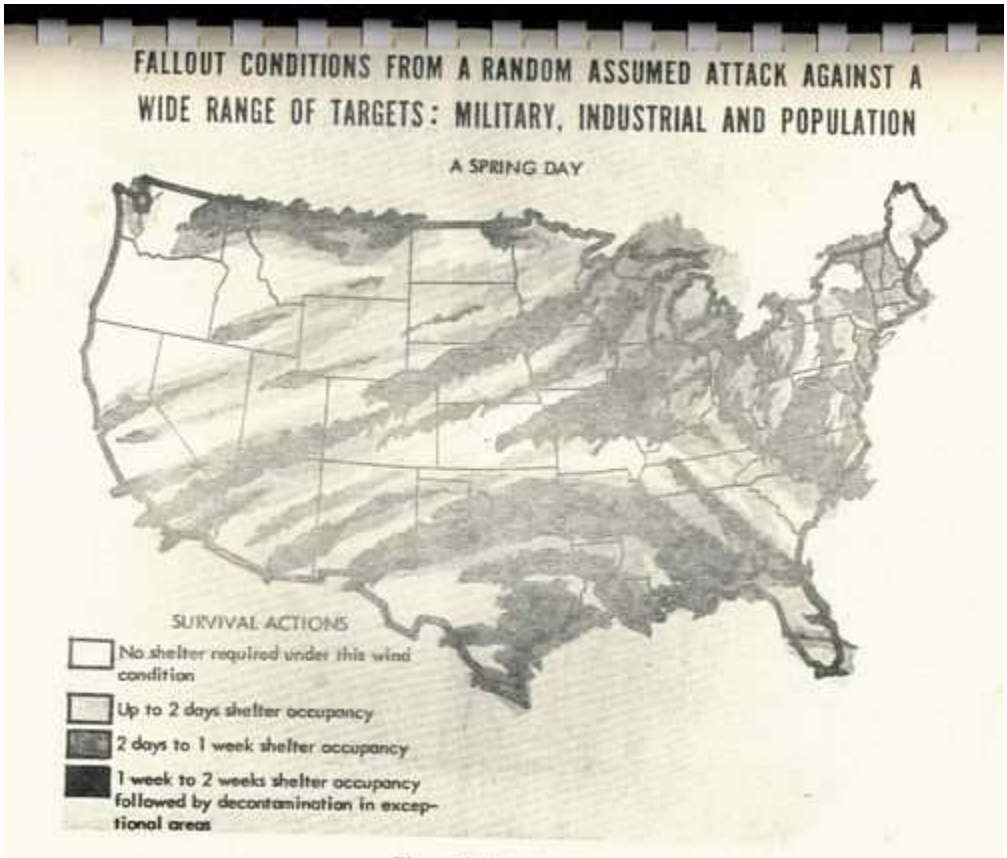
"Which utterly with sadness had confused me, New torments I behold, and new tormented Around me, whichsoever way I move, And whichsoever way I turn, and gaze." Dante, Divine Comedy, Inferno, Canto VI, third circle, gluttony.

The first image shows the effects of a 20 megaton nuclear blast detonated in in a city, presenting an incredible picture of absolute destruction, reaching out from ground zero for more than 11 miles. This doesn't begin to measure the overall damage inflicted by radiation, which is deeply, extraordinarily, severe. This again is the effect of one weapon, the 100% fatality rate eventually reaching out 12 miles; 90% reaching over 40 miles. General casualties extend to 80% up to 70 miles from ground zero.





The emergency planning end of the paper comes in at about this point.The fallout map of the U.S. shows a possible situation of an unspecified (though wide-ranging) attack (on a "spring day") and its effects on the population as it is housed in various shelters and bunkers, suggesting the amount of time needed to "survive" the attack by staying inside the fail safe habitation.



The following chart, "Lifesaving Potential of Improved Strategic Defense" (in millions of people) shows the effect of the installation of the shelters and bunkers. In this scenario, in a massive strike, the fatality rate in the U.S. of an unprotected population was 65%, or 144 million. On the other end of the extreme was "ballistic missile defense plus blast shelters plus fallout shelters", or a massively-protected population of fictional expanse shows that in spite of all precautions 45.2 million people would die (as "unavoidable fatalities").

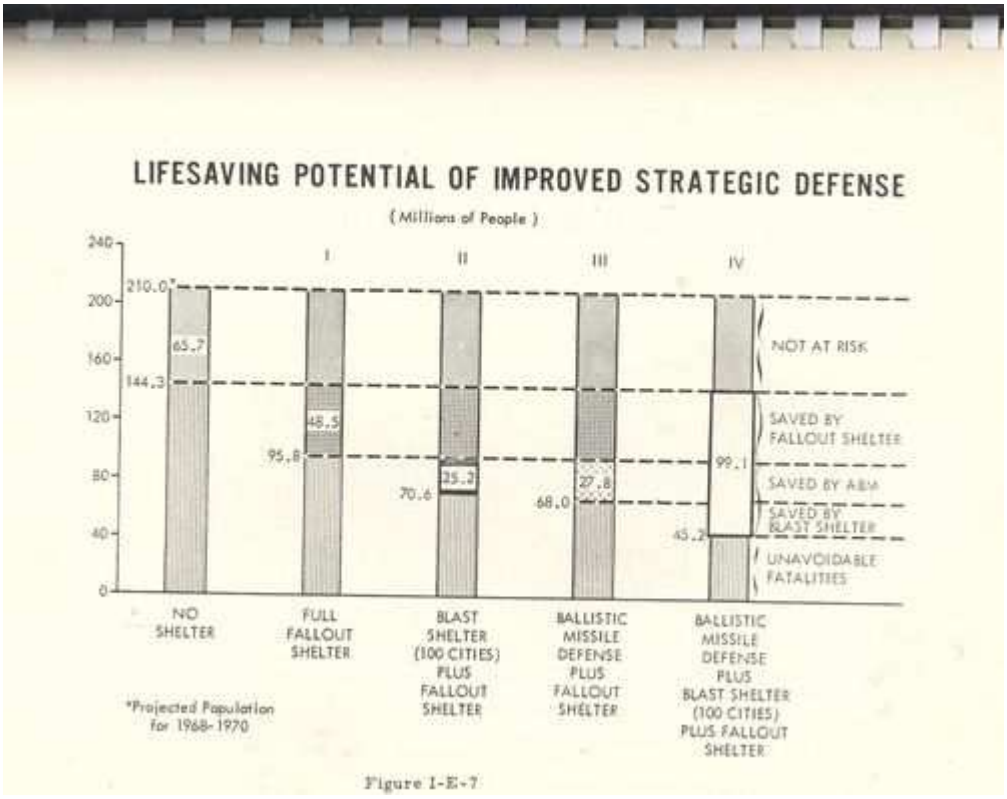


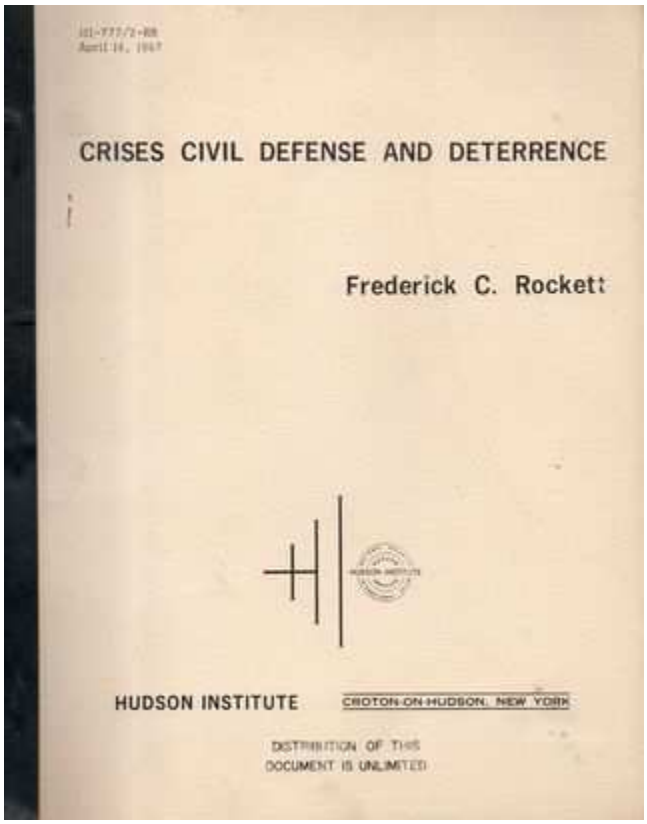
Figure I-E-7

"These have no longer any hope of death; And this blind life of theirs is so debased, They envious are of every other fate." Canto III, Vestibule of Hell, the Opportunists.

This document is nothing if not a death sentence had the massive strike ever been launched. In the dozens of such reports that I've seen, there hasn't been one with the Really Big One with thousands of euphemistically-named "exchanges", which I assume would make all of these others pale by comparison.

Civilian Populations as "Hostages" in Nuclear Deterrence

ROCKETT, Frederick C. *Crises Civil Defense and Deterrence*, Hudson Institute, 2967, 64pp, 11x8 inches. Fine copy. $175 WorldCat/OCLC find 20 copies, though the book seems not to make it to market.



Frederick Rockett's *Crises Civil Defense and Deterrence* makes a curious display of itself on it title page, what with no punctuation and all--same for the title page, though that changes a little to Crisis Civil Defense and Deterrence. With a comma here and there, the title changes meanings a bit. In any event with my little screed over the document was published by the Hudson Institute in 1967 and is actually about how the Soviet Union, China and some other countries could reduce their vulnerability to nuclear attack by undertaking (emergency) civil defense precautions like large-scale evacuations and fallout protection. The author adopts a curious term here--"hostages"--to apply to the civilian population in relation to the nuclear policy of deterrence. And what that means is that with increased numbers of civilians surviving there would be a greater recover capability after a nuclear strike; in deterrence, enemy populations are part of the scheme, being seen as "hostages" to a nuclear strike and therefore a deterrent for that country to initiate an attack. With an increase in the number of survivors to an attack via the civil defense advancements there are fewer "hostages" and therefore the concept of

deterrence is weakened, perhaps to the point where countries could begin to think of first-strike capacity with a more-protected population. And so: 11x8", perfect-bound with black cloth spine covering. VG copy, though the spine covering is peeled away in places, the binding is unaffected. $175

And so down the rabbit hole we go, discussing mineshaft gaps. This is five year after Dr. Strangelove, but this was very real stuff--and I imagine that if I were in a position to have to think about nuclear strikes and deterrence and etc., I probably would have been thinking in these terms, too.

Outrageous Analogy Dept: How Hitler Can Help in the Post-Nuclear-Attack USA, 1967

Terence G. Jackson, jr. *German Wartime Industrial Controls: an Analogy to Recovery from Nuclear Attack.* Office of Civil Defense, Department of the Army, Stanford Research Institute, 1967. 10x8 inches. 137pp. WorldCat/OCLC locates 5 copies. $200.00

> "Understanding, n. A cerebral secretion that enables one having it to know a house from a horse by the roof on the house. Its nature and laws have been exhaustively expounded by Locke, who rode a house, and Kant, who lived in a horse." Ambrose Bierce, The Devil's Dictionary
>
> "The German experience in reordering an industrial economy for total war in the midst of conflict offers insights into planning for postattack conditions"--Stanford Research Institute, 1967

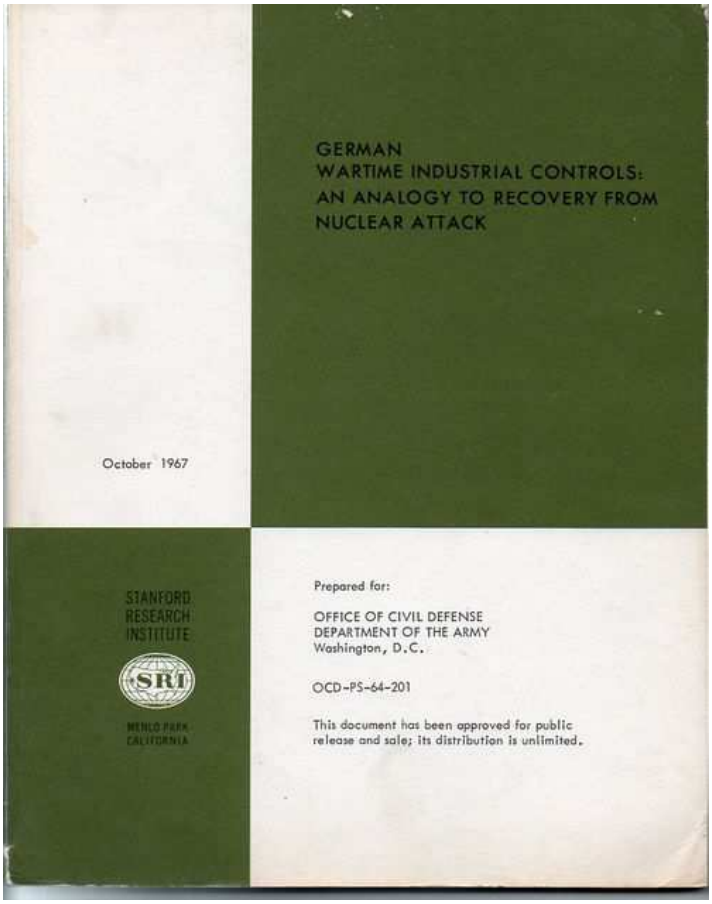
If such is the case for understanding, then I think that those responsible for the pamphlet German Wartime Industrial Controls: an Analogy to Recovery from Nuclear Attack intended to ride their house in the Kentucky Derby and upgrade the kitchen in their horse. After all, ideas are just connections among words, though it seems that here it might be just between words, or suggestions between letters, although the words might all be privately defined.

This pamphlet is another one of those monuments of living proof showing the impossibility of defining where the "bottom" might be in the well of bad ideas--even when you strangle this Nazi business into its own, narrowly-defined category, trying to extricate the logic of its titanically bad idea, the pamphlet instantly ignites when removed from its ether-y vacuum of under- and over-think and exposed to oxygen.

It was the Stanford Research Institute (Menlo Park, California) that produced this thing, carved whole and with precision from a quivering block of fat and federal dollars. If the title doesn't stop time, the first page will. There we are introduced to Albert Speer (1905-1981), Minister of Armaments and War Production and architectural joyboy for Adolph Hitler. We are told about the basis for his exceptional achievement in reordering the German economy to all-out war production thus:

"...a vast armament production would have to be obtained through scrupulous attention to increased production efficiencies and the most effective use of fixed supplies and essential materials and skilled labor. Speer developed a unique variant of conventional economic planning for a controlled economy and applied it successfully..." (from page 1.)

Speer, a high-ranking Nazi party member since 1931 and intimate of Hitler, was convicted of crimes against humanity and war crimes at the Nuremberg Trials in 1946, and sentenced to 20 years at Spandau prison, not the least of which was for his broad and acknowledged use of slave labor. The "P" in the square standing on its edge at the top of this post is the symbol worn by a Polish slave laborer--there were some 12 million people abducted/arrested/stolen by the Nazis to work on various parts of German society.



Perhaps this was part of the "scrupulous" detail and the "effective use" of fixed supplies that the author of the Stanford paper was writing about? Surely anyone studying Speer's methods would have known this--that the author would chose to ignore this sets every moral compass everywhere into free spin.

But such is the realm of the coin in the ugly, a bubbling bulk of post-attack scenario scripting done at

the taxpayers' vast expense in waging the Cold War is littered with vocabulary meant to redirect the attention, essentially to change the meaning of words in discussing the outcomes of vast nuclear war. For example, we find the phrases "period of fractionation", "the break in traditional economic time series" and "production degradation" in certain documents (which I discuss in an earlier post here) used to describe the breakdown of the American social and industrial base following a nuclear war.. These are just three of thousands of such examples, not the least of which is nuclear "exchange", which is a conceit suggesting something less than the U.S. and the Soviet Union blasting away at one another with spectacularly deadly weapons. (Perhaps the thinking is that such a situation wouldn't necessarily be a "war", and so it is something less than that, like the Korean War really wasn't one but a U.N. policing action.)

But enough of this, were not even a full page into the report, which I remind you tells us we can find useful lessons in Hitler's monstrosity, particularly about war production--that is producing materials post-attack so that we can either defend ourselves or attack again, all by taking a look at Germany, and particularly "the improvisation by gifted industrialists driven to the limits of their power and imagination" (page 12 of the report). It is difficult to want to read this report because everywhere I look there are Orwellian Ghosts--half-referenced facts wrapped in Newspeak, available at random. For example, on page 31, in discussing oil and rubber production, I find:"The output of the new synthetic Buna-s rubber was increased to 22,000 tons in 1939 and to 69,000 tons ion 1942 by accelerated production of new plant." The "new plant" is the think tank version of "new plants" (the plural is left off of many things for unknown reasons but I guess mostly for a form that seems to have more economo-cache than the simple English expedient), which is a very simplistic way of telling of the enormous production battles in Germany to come up with their own, home-brewed (and not foreign-dependent) rubber (the super-necessity of all things military).[1] The other part not mentioned here in what seems to be a disingenuous appraisal of Nazi rubber production is the increase in 1943/1944, particularly from the "new plant" at Monowitz, which was also known as the Buna Works, and better known yet at Auschwitz III, where slave laborers were put into work-or-die situations producing Buna-s as part of the overall Auschwitz complex of forty camps and subsidiaries.

Here's another example, tying Hitler and (Fritz) Todt and Speer together--Todt was "one of Hitler's most important administrators", who would be replaced by Speer "who had been an assistant to Todt"--though not mentioning that Todt had used millions of slave laborers (Zwangsarbeiter) in doing his "administrating". Speer would do the same.

ANd so on and on this paper crawls until it reaches its end, which is published on detachable sheets on pages one through three, pullaways for the executive summary so that the text and subsequent

documentation and analysis could be discarded. It seems to have been a waste of detachable paper when the whole thing could be thrown away at once. The author makes a case for studying the Nazi situation because it was the closest thing in modern times to use as an analogy to the possible scenario in America after nuclear war, and then launches into an analysis of Nazi "competitiveness". The author never comes close to making a compelling argument for the closeness of fit for its major assumption, though, and as far as I can tell the logic of it just doesn't work,which makes the rest of what follows unnecessary. I guess they could've kept their federal grant by identifying ideas that wouldn't work as America post-attack analogies--which is also useful--and could've easily used what they had here for that purpose. But at that point I'm not sure what is the more ridiculously-titled idea--I couldn't imagine someone reading the report on why Nazi industrial controls weren't a good analogy, because it seems tautological and unnecessary; and yet the opposite is what gets thought about and published, in all of its error and omission, swimming in its own turgid muck. This is what people were thinking about in 1967 when, evidently, houses didn't have roofs.

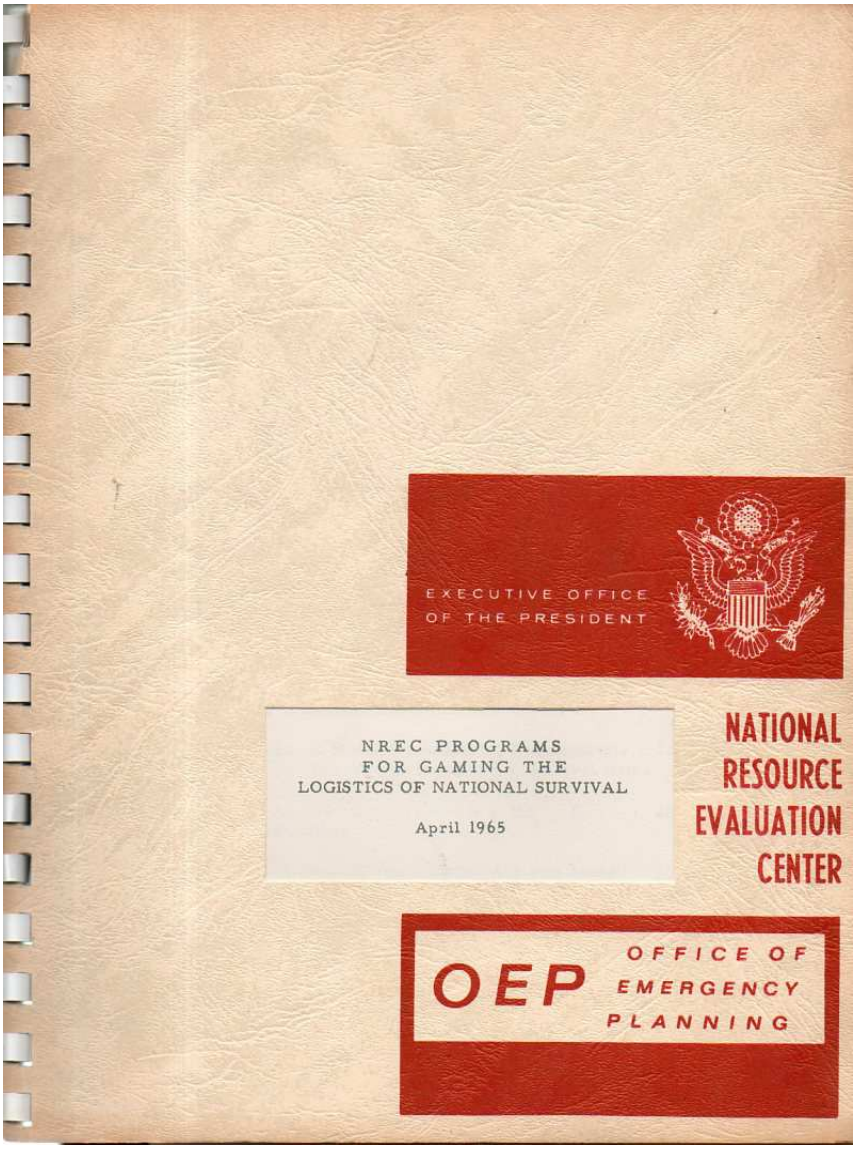
Notes:

1. Germans were forbidden to import chemicals and food from 1933-1937, forcing Germany industry to come up with their own versions of things like rubber, meaning that there were many new places in which Buna-s (BUtdiane & NAtrium) was produced. That rubber production increased so much was a function also of not being able to import the stuff.

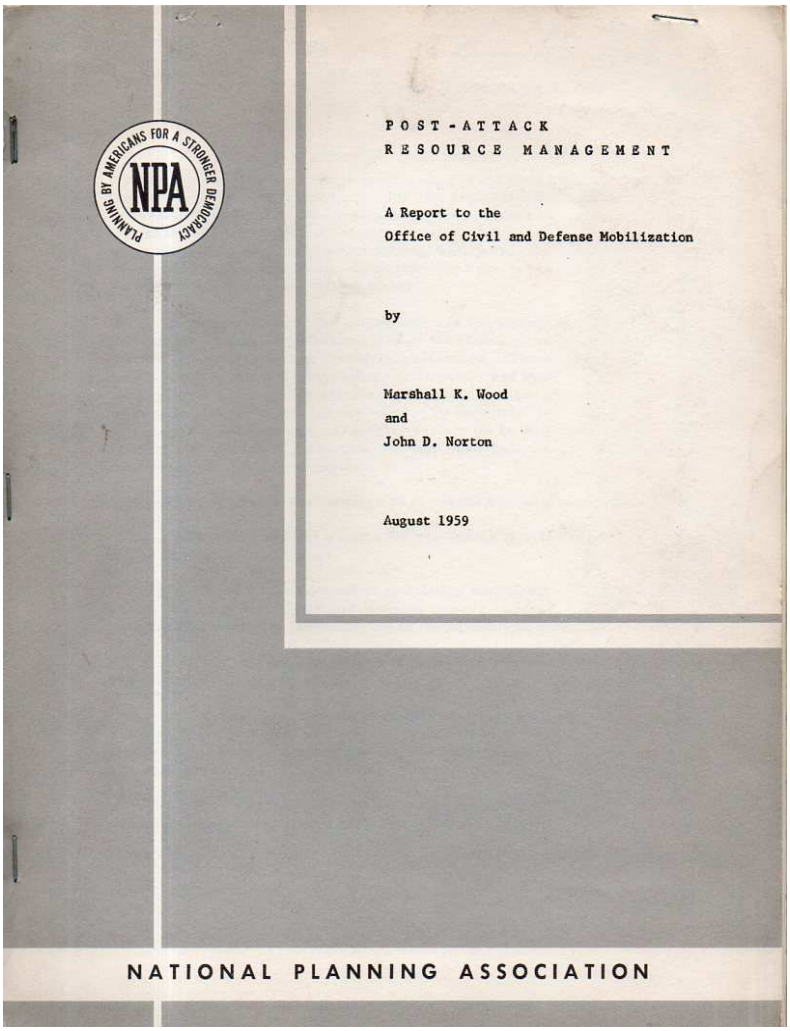
Computer Programs for Survival and Vulnerability

NREC Programs for Gaming the Logistics of National Survival. The National Resources Evaluation Center, Executive Office of the President, Office of Emergency Planning, Analysis and Research Office. 11X8", 51pp. GVC binding. Numerous (25) copies located by WorldCat/OCLC, though the book seems to be seldom on the market. $175

Abstract: "Four articles based on papers presented ... at a session on "The logistics of national survival in the Fourth Symposium on War Gaming of the East Coast War Games Council ... at McLean, Virginia, on March 25 and 26, 1965." Includes "READY, a Damage Assessment Model"; "SURVIVAL, a Model for Analyzing Requirements for, Versus Supplies of, Survival Items"; "PARM, an Inter-discipinary Model of the U.S. Economy"; and RISK II, a General Vulnerability Analysis Model".

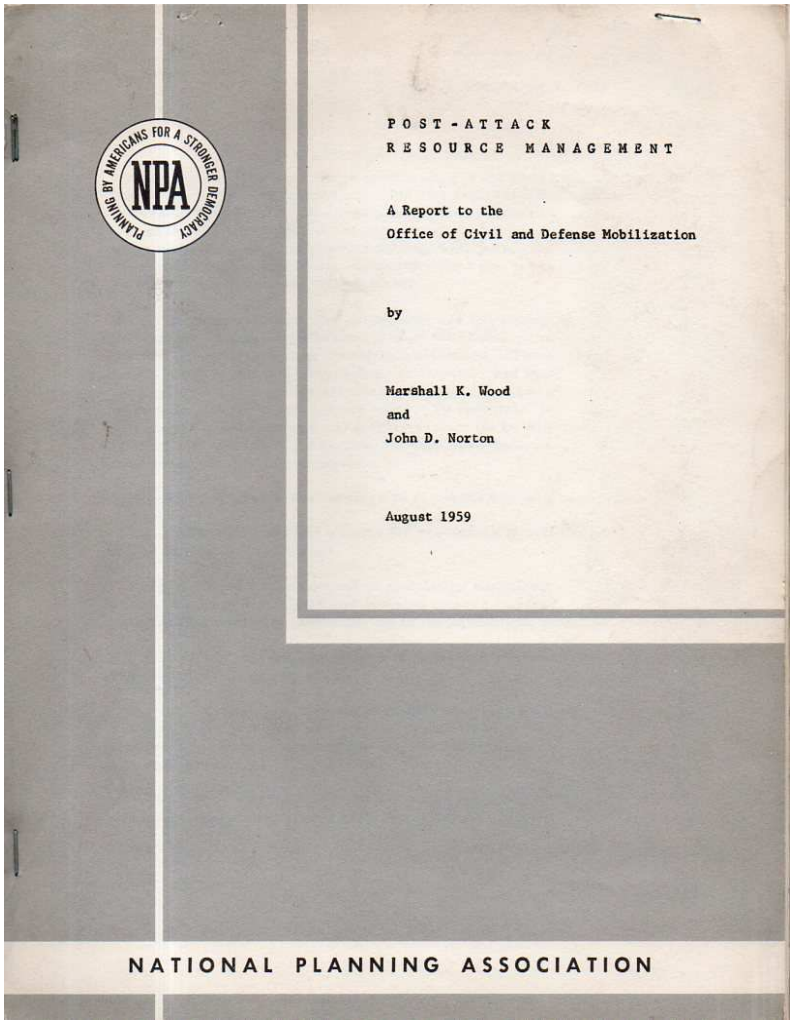

EXECUTIVE OFFICE
OF THE PRESIDENT
NREC PROGRAMS
FOR GAMING THE
LOGISTICS OF NATIONAL SURVIVAL
April 1965
NATIONAL
RESOURCE
EVALUATION
CENTER
OEP
OFFICE OF
EMERGENCY
PLANNING

WOOD, Marshall K. and John D. Norton. *Post-Attack Resource Management.* A Report to the Office of Civil and Defense Mobilization. National Planning Association, 1959. 11x8", 83pp. Printed wrappers. Fine copy. WorldCat/OCLC locates 1 copy (of 39pp?). $175



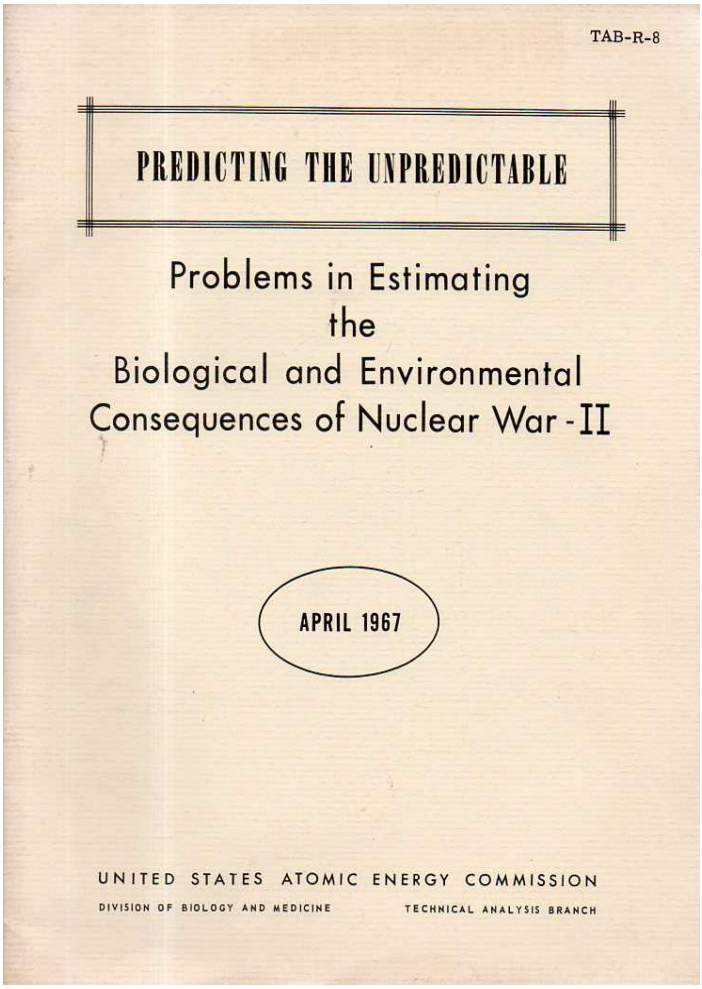
SHEPHARD, Ronald W. *Progress Report Civil Defense Research Project* . University of California, Institute of Electrical Engineering, July 31, 1958. ("Sponsored by Office of Civilian and Defense Mobilization." 11x8", 30pp. WorldCat/OCLC locates 1 copy. $200

Offered with 8pp of handwritten notes by Dr. Joseph Coker, chief of the National Resource Evaluation Center, Office of Emergency Planning, Executive off of the President.)

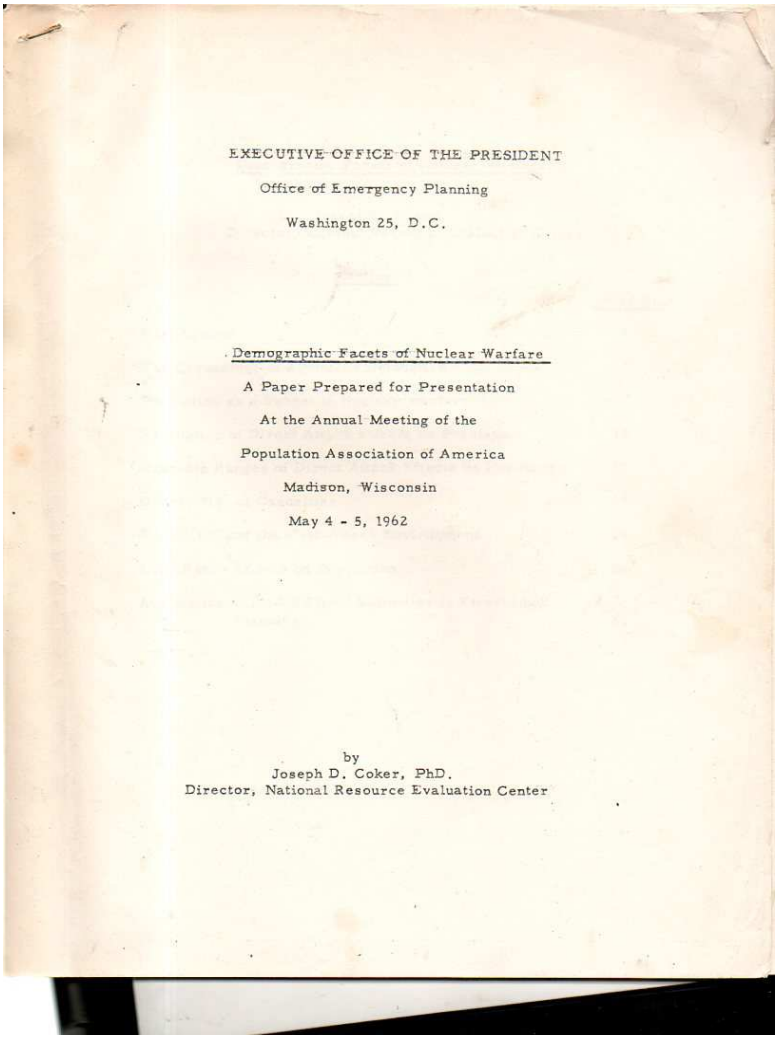


THRELKELD, James B. and Hal Hollister. *Predicting the Unpredictable. Problems in Estimating the Biological and Environmental Consequence of Nuclear War-II*. U.S. Atomic Energy Commission, Division of Biology and Medicine, Technical Analysis Branch. TAB-R-8. 11X8", 23pp. Fine copy,

WorldCat/OCLC locates 1 copy (no copy found of anything with this title being Part I). Paper wrappers.



COKER, Joseph D. "Demographic Aspects of Nuclear Warfare", Director, National Resource Evaluation Center. A paper prepared for presentation at the Annual Meeting of the Population Asdsociation of America, Madison, Wisconsin, May 4-5, 1962. 11x8", 40pp. 11X8", mimeographic reproduction. WorldCat/OCLC locates 2 copies. $150



EXECUTIVE OFFICE OF THE PRESIDENT

Office of Emergency Planning

Washington 25, D.C.

Demographic Facets of Nuclear Warfare

A Paper Prepared for Presentation

At the Annual Meeting of the

Population Association of America

Madison, Wisconsin

May 4 - 5, 1962

by

Joseph D. Coker, PhD.

Director, National Resource Evaluation Center

"Don't Reveal Secret Information"

Parry Island Breeze, published at the Eniwetok Atoll, 22 daily issues February 24 1954 through April 13, 1954. WorldCat/OCLC locates 0 copies. 13X8", mimeographic single-sheet newsheet, published at Parry Island, Eniwetok Atoll, Marshall Islands, for the reading of U.S. Servicemen stationed there for the years of conducting nuclear weapons tests. During the time of publication for the *Parry Island Breeze* the operation named "Operation Castle" was underway. "Operation Castle was a United States series of high-yield (high-energy) nuclear tests by Joint Task Force 7 (JTF-7) at Bikini Atoll beginning in March 1954. It followed Operation Upshot-Knothole and preceded Operation Teapot. Conducted as a joint venture between the Atomic Energy Commission (AEC) and the Department of Defense (DoD), the ultimate objective of the operation was to test designs for an aircraft-deliverable thermonuclear weapon."--(Wiki)

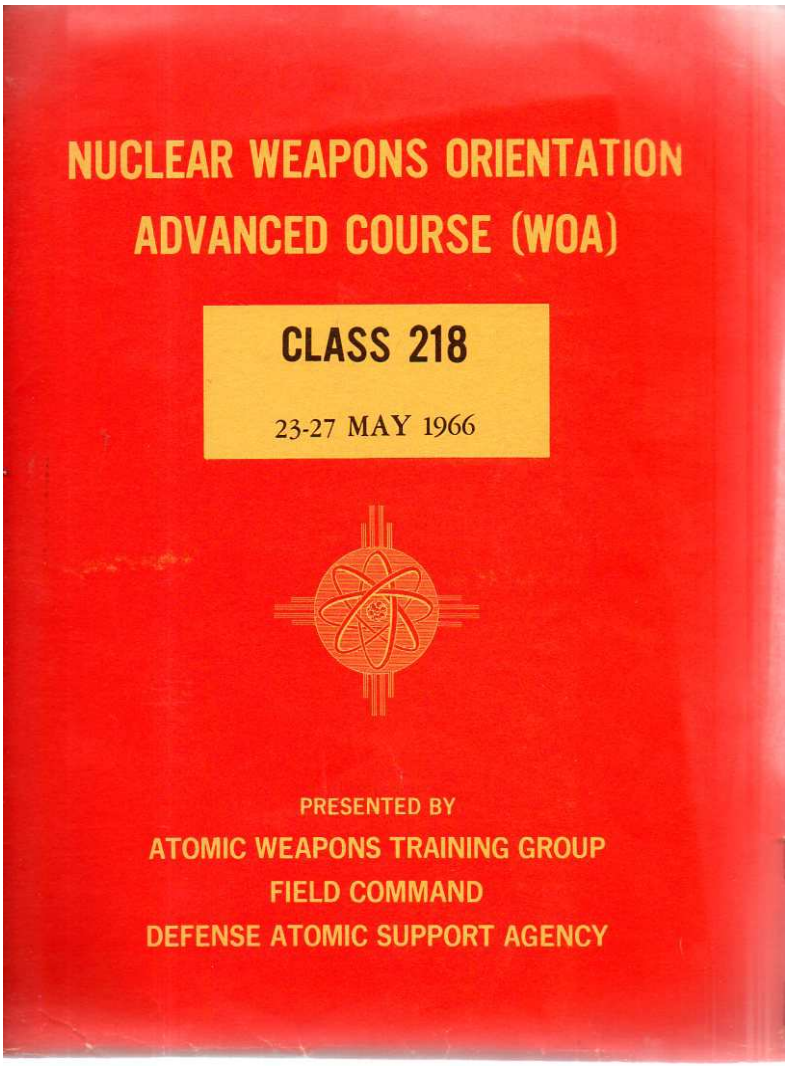
The papers are an interesting insight into the daily lives of the servicemen in the Marshall Islands—there is of course nothing whatsoever printed in them about what everyone was working on. The news is filled with sports, society bits, films, news from home, and that sort, along with news of whether there was mail service, what was on the menu for chow, and other bits. $250

Nuclear Warfare Training Ephemera

Nuclear Weapons Orientation Advanced Course (WOA). Class 218, 23-27 May 1966. Presented by Atomic Weapons Training Group Field Command, Defense Atomic Support Agency. Folder containing the following items, all contained in a printed folder. $200

- Glossary of Terms, Joint Weapons Division, Atomic Weapons Training Group, Field Command, DASA. Sandia Base, Albuquerque, New Mexico. “For Resident Instruction Only” 9x6, 68pp.
- Welcoming letter (xerox) National Capabilities Division, Atomic Weapons Training Group.

- Sheet:“Safeguarding of Security and Badges.
- Sheet:AWTG Student Map
- Program of Instruction for Nuclear Weapons Orientation Advanced Course (WOA) 11x9”, 16pp. 1 September 1965.

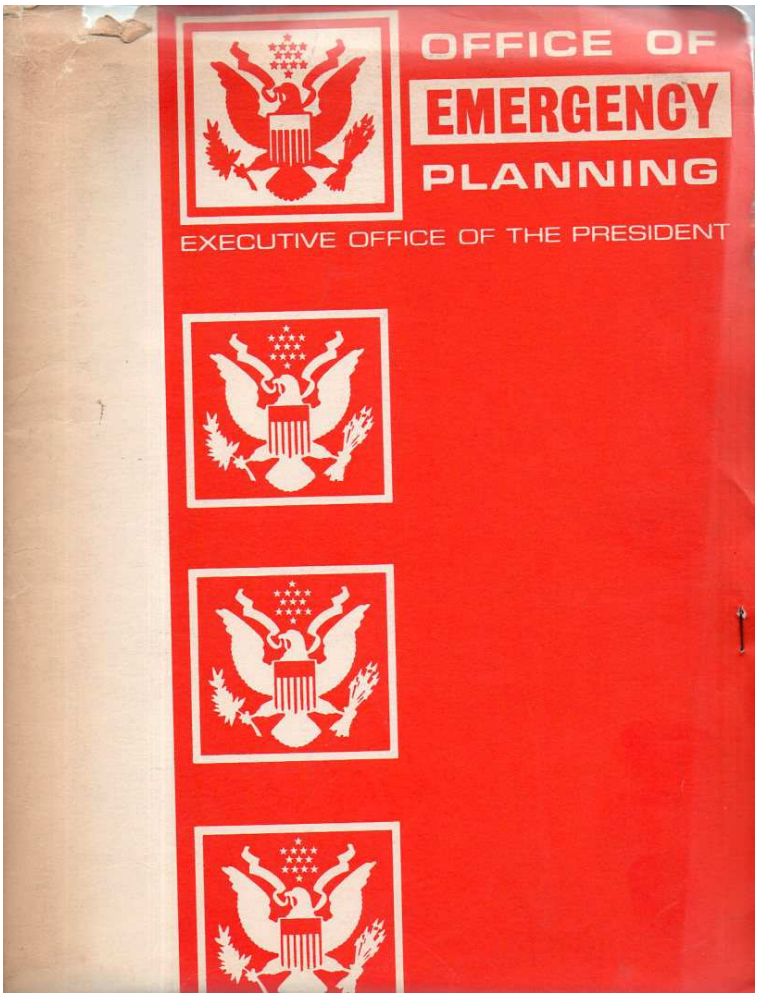


Office of Emergency Planning, Executive Office of the President. Meeting/Briefing (?) folder containing documents in various stages of reproduction (including xeroxes and mimeograph) and contained in an OEP folder. $450 From the estate of Dr. Joseph Coker, Director, National Resource Evaluation Center.

Includes the following:

- OEP Circular 6500.1 The National Resource Evaluation Center. (Description of the creation and function) 7pp. 1964
- Recommendation of the PARM Review Committee. Xeriox, 1963. 7pp.

- Notes on the Evaluation of the Impact of Changes in Economic Programs. 1965, 4pp.
- Application of New Technologies to Emergency Planning and Resource Management. 1965, 11pp
- Notes on the Evaluation of the Impact of Changes in Economic Programs. 5Pp, 1965.
- NREC'S Expanding Capabilities to Support Resource Management. 1965, 11pp.
- The Expanding Capabilities of the Resource Evaluation Division to Support Resource Management, 8pp
- Resource Evaluation. 1967, 2pp.
- Bi-Regional Meeting, Manpower Mobilization Coordinaters. 1965, 2pp.
- Program Plan for the Summer Quarter of 1967 (from Joseph D. Coker) 1967, 29pp.
- Proposed FY 1968 Programs National Resource Evaluation Center, 19pp.
- NREC Program Plan for Third Quarter 1966 (Revised) (Xerox+offset) 1966, 41pp.
- And 10 other similar documents.



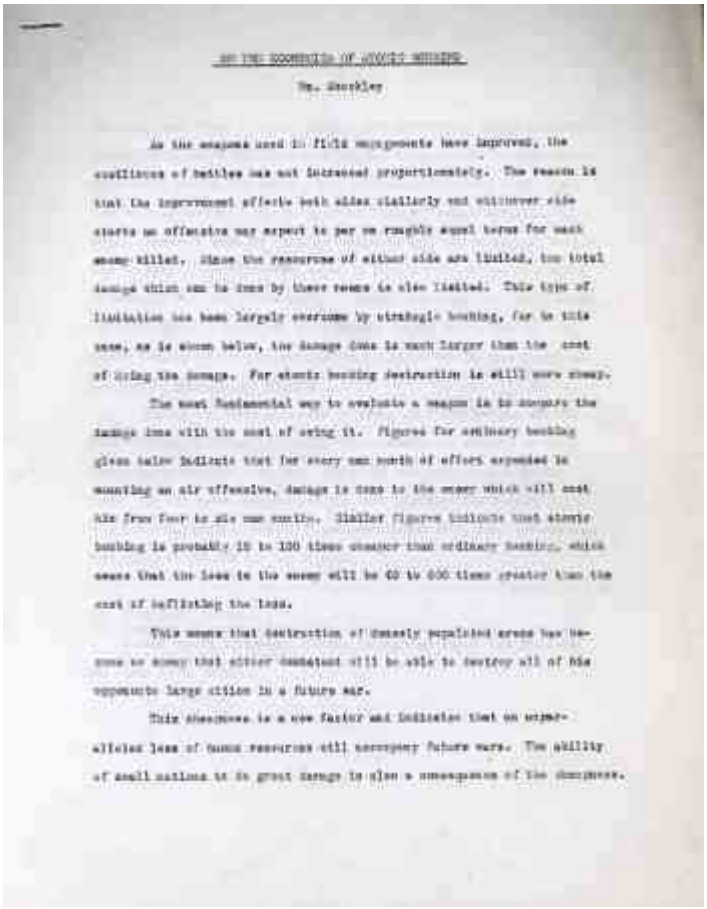
Background and Draft Papers and Proposals for the Vannevar Bush group working on the Question of the Control of Atomic Weapons

Behind-the -scenes documents on the formalization of the American position regarding the use and control of atomic weapons, October 1945-February 1946.

35 documents relating to the development of U.S. atomic policy, October 1945-January 1946, with contributions by President Harry Truman, Secretary of State James Byrnes, Dr. Vannevar Bush, AEC director Carroll Wilson, Alger Hiss, I.I. Rabi, William Shockley, Frederick Dunn, Joseph E. Johnson, Leo Pasvolsky, Philip Morrison, Col. Nicholls, William McRae, Admiral W.H.P. Blandy, George L. Harrison, and others. $7,500

An example--and perhaps one of the most interesting documents--from this archive:

- William Shockley. The Economics of Atomic Bombing. 11x8 inches, 5 leaves, carbon copy, about 1500 words.



Mr. Shockley

As the weapons used in this encounter have improved, the casualties of battles has not increased proportionately. The reason is that the improvement affects both sides similarly and whichever side starts an offensive may expect to pay an roughly equal terms for each enemy killed. Since the resources of either side are limited, the total damage which can be done by these means is also limited. This type of limitation has been largely overcome by strategic bombing, for in this case, as is shown below, the damage done is much larger than the cost of doing the damage. For atomic bombing destruction is still more cheap.

The most fundamental way to evaluate a weapon is to compare the damage done with the cost of using it. Figures for ordinary bombing given below indicate that for every one month of effort expended in mounting an air offensive, damage is done to the enemy which will cost him from four to six man months. Similar figures indicate that atomic bombing is probably 10 to 100 times cheaper than ordinary bombing, which means that the loss to the enemy will be 40 to 600 times greater than the cost of inflicting the loss.

This means that destruction of densely populated areas has become so cheap that either combatant will be able to destroy all of his opponents large cities in a future war.

This cheapness is a new factor and indicates that an unparalleled loss of human resources will accompany future wars. The ability of small nations to do great damage is also a consequence of the cheapness.

The William Shockley paper was written towards the end of 1945 and is on five pages and runs about 1500 words. He begins the paper with a logical statement of the issue of the economics of conventional and atomic bombing, ending with the sentence "For atomic bombing destruction is still more cheap". What Shockley is getting to is the overall cost of the amount of destruction caused per square mile, and the conclusion that he draws over these five pages is the destruction caused by the atomic bomb is 1/100th the cost of conventional bombing per square mile destroyed ("atomic bombing is probably 10 to 100 times cheaper than ordinary bombing").

Shockley also recognizes that the problem in the near future will be the increasing cheapness of producing atomic (and greater) weapons, and their developing accessibility to small nations. "This cheapness is a new factor and indicates that an unparalleled loss of human resources will accompany future wars. The ability of small nations to do great damage is also a consequence of the cheapness." He writes further that taking this thinking to its "logical conclusion", that at some point in the future a single individual will be able to use this new technology to destroy the world. The main point though that he was making in this line of thinking was the dispersion and proliferation of the new technology--that an arms race would occur, and that it would be dangerous, and that it could be very very bad. Shockley has of course nothing to say about any of that or the implications of his finds as that was not his charge.

After figuring that the cost of destruction by the atomic bomb was about $600,000 per square mile (compared to $6,500,000 per square mile for conventional bombing), Shockley concludes that “since the atomic bomb art is in its infancy, we may well expect future economies of a factor of 10 in cost per square mile destroyed…”

Shockley on the likelihood of casualties during the final invasion of Japan.

(The following three paragraphs are taken entirely from CASUALTY PROJECTIONS FOR THE U.S. INVASIONS OF JAPAN, 1945-1946: PLANNING AND POLICY IMPLICATIONS by D. M. Giangreco in the Journal of Military History, 61 (July 1997): 521-82

“As for Dr. Shockley's initial report to Dr. Bowles, it was not submitted until after Stimson had left for Potsdam. He proposed that a study be initiated "to determine to what extent the behavior of a nation in war can be predicted from the behavior of her troops in individual battles." Shockley utilized the analyses of Dr. DeBakey and Dr. Beebe, and discussed the matter in depth with Professor Quincy Wright from the University of Chicago, author of the highly-respected A Study of War; and Colonel James McCormack, Jr., a Military Intelligence officer and former Rhodes Scholar who served ! in the OPD's small but influential Strategic Policy Section with another former Rhodes Scholar, Colonel Dean Rusk. Shockley said:

"If the study shows that the behavior of nations in all historical cases comparable to Japan's has in fact been invariably consistent with the behavior of the troops in battle, then it means that the Japanese dead and ineffectives at the time of the defeat will exceed the corresponding number for the Germans. In other words, we shall probably have to kill at least 5 to 10 million Japanese. This might cost us between 1.7 and 4 million casualties including [between] 400,000 and 800,000 killed."--W. B. Shockley to Edward L. Bowles, 21 July 1945, "Proposal for Increasing the Scope of Casualties Studies," Edward L. Bowles Papers, box 34, Library of Congress. ... No accurate total of German military and civilian deaths was available at the time he prepared his report, but the number was eventually set at roughly 11,000,000. was not invaded and finished the war with just over 7,000,000 casualties, most of them from its armed services on the Asian mainland in fighting from September 1931 to September 1945.

Contents: (1) Abstract; (2) Provenance; (3) Note on the Manner of Investigation; (4) Outline; (5) Authors and Contributors; (6) the Documents, Chronological Listing; (7) the Documents, alphabetical listing, in table.

(1) Abstract

Vannevar Bush, one of the most important scientist-advisors of World War II, foresaw the development of the atomic arms race in 1943, and by 1945 became a fundamental thinker and advocate on the problem. The 38 documents below are, almost without exception, by aides and close colleagues of Bush who assisted him in formulating the positions and issues, dating from October 1945 through January 1946. They consist of background papers, drafts of proposals, informal studies, as well as mature statements of thought that would become implemented in the core of U.S. policy regarding the spread and control of atomic weapons. They are generally carbon typescripts and necessarily of extremely limited distribution, generally have no letterheads, occasionally carry the authors’ full names (although sometimes only initials are used), and 18 are stamped or typed “Secret”.

(2) Provenance:

These documents were procured from the estate of Dr. Caryl Haskins (b. 1908) a close and long-time friend of Vannevar Bush, and who worked with Bush throughout World War II at the OSRD, and executive assistant to Bush at NSRD 1941-1945. Ph.D. Yale '30 (E.E. at 22), Ph.D. Harvard 1935; LL.D. Carnegie Institute Technology 1955. He was research associate at MIT 1935-1945; he was on the Scientific Advisory Board of the Army and Navy, 1947-8; Research Consultant to the Secretary of the Army, 1950; Executive Research Consultant to he Secretary of State 1950-1972 Haskins was on the board of Scientific advisors to President's Truman and Eisenhower, and succeeded Bush as president of the Carnegie Institution (1956-1973). He held numerous positions in industry (serving on the board of directors of Dupont Chemical, for example), was a member of the exclusive Council on Foreign Relations (nominating H. Kissinger to the board, for example), a regent of the Smithsonian and National Geographic Society, a fellow of the AAAS, and a trustee of the Educational Testing Service.

(3) Note on the Manner of Investigation, with Footnote on Sources:

One key discovery in forming the documents into a whole unit was the 3-pp mimeographed summary of Vannevar Bush's integral memorandum to Secretary of State James Byrnes at the very crux of the negotiations for the meeting with British Prime Minister Clement Attlee, which would be a combined powers announcement of intent concerning the atomic bomb prior to the creation of the United Nations. The document reads "Department of State/Office of the Counselor/Washington/November 23, 1945/To: IS- Mr. Joseph E. Johnson/From: C-Mr. Doyle" and reads "The pertinent parts of Dr. Bush's memorandum of November 5 1945 to the Secretary as follows…." This is the document alluded to (but not footnoted or quoted) in Richard Hewlett's massive and canonical history of the United States Atomic Energy Commission in volume 1, pg 459, chapter 13, "Controlling the Atom, from Policy to Action", sub-headed "Bush Once More". It describes the unpreparedness of the U.S. just days prior to this important meeting, and how Bush was able to take advantage of the situation and develop a policy statement for use by Brynes and Truman. Hewlett writes "On Saturday, November 3, (Bush) called on Byrnes and stressed the need for some sort of policy. Byrnes proved receptive to suggestion and asked Bush to set out his views in writing. It meant a busy week end, but on Monday [5 November, ed] Bush had a seven page statement ready…" The form and content of mimeographed document in the collection is without doubt the summation of this statement. With this piece of evidence in place, there was no question concerning how the rest of the documents in this small archive applied.

Some sources used: Richard Hewlett, The New World, a History of the United States Atomic Energy Commission, 1939-1946, volume 1 (of 3), Pennsylvania State University Press, 1962. Zachry, Vannevar Bush, Interviews and Correspondence: Richard G. Hewlett, Philip Morrison, Ralph Cundry, (Librarian, DOE).

(4) Outline

Vannevar Bush, presidential adviser, MIT professor extraordinaire, inventor (with Gage and Stewart) of the continuous integraph, inventor of the cinema integraph, inventor (with Hazen) of the differential analyzer, first chief of the Manhattan Project, director of the OSRD (Office of Scientific Research and Development), chair of the NDRC (National Defense Research Council), architect of the National

Research Council, and father of the internet (via the "Memex"), was one of the most influential American scientific advisors and intellectual architects since Benjamin Franklin. Bush was largely responsible for organizing the American scientific and technical effort during 1940-1945, and was perhaps one of the most influential Americans from 1932-1946.

The papers below relate to the problem of the control of atomic weapons. Bush was extremely early (around 1943) in recognizing that after the successful implementation of atomic weapons that the United States would be faced with the issue of atomic arms proliferation. On 8 December 1944 Bush was at the War Department meeting with Harvey Bundy (Stimson's aid on atomic matters) and J.J. McCloy (asst Secretary of War and first chief of the CIA) suggesting that the President should immediately mandate an advisory committee to form press relations, draft legislation, and bringing in the State Department to work on the international aspects of the use of the atomic weapons. (The issue of control loomed large in public of course after the bombing of Japan in August 1945, see Groves 409-412, Hewlett 465-81, Truman Memoirs 1: 523, 2: 5-16 Henry Stimson's wartime diary records 2/15/45 Diary Entry: "Dr. Vannevar Bush came in to talk with me about postwar scientific problems. He is proposing a general pooling among the nations of all scientific research and an interchange of everything that is susceptible of military use. He hopes in this way to prevent secret plans for secret weapons such as Germany has been getting her scientists to do during times of peace. After a talk with him I thought that such a plan was along the right lines but that it would be inadvisable to put it into full force yet until we had gotten all we could in Russia in the way of liberalization in exchange for S-1. After the discussion Bush and I though that perhaps it would be good to make a start with one form of scientific research and he suggested bacteriological research as probably the most practical one to try."). The initial steps in control were taken at the Quebec Conference in 1944 in which the United States, Great Britain and Canada joined forces to determine the control of information and technical data concerning atomic weapons. Bush had worked with Roosevelt on this problem, proposing on 14 February 1945 that the UN charter should look ahead to the possible international control of nuclear weapons.

In May 1945 Truman accepted the input of Secretary of War Henry Stimson, acting on the work of George Harrison and Bundy, and under the influence of Bush to create the an advisory committee on the developments of atomic energy and weapons. This was to be known as the Interim Committee--Stimson was to act as the chair but would later be replaced by Byrnes, with Harrison as an alternate; the other members were Bush, James B. Conant, Karl T. Compton, Ralph Bard (under Secretary of the Navy), and Assistant Secretary of State William L. Clayton--which would meet for the first time just a week or so after Germany surrendered, 14 May 1945). The Interim Committee was a leading edge on the implementation of atomic policy, from the questions of whether or not the bomb should actually be used, whether the bomb should be used against Japan, what the United States should do after the bomb had been used, and how the bomb "becomes a primary question of our foreign relations" (Stimson, echoing Bush and others). [It was the Interim Committee that recommended on 1 June that the bomb should be used against Japan and done so without warning or notice, and leaving the precise target of the bomb as a military decision. John von Neumann had once argued for Kyoto as the first target, but it was Stimson who persuaded the military against the ancient religious city and towards a more industrial target. Bush, like many other scientists, under-evaluated the vast effects of radiation].

One of Bush's integral ideas on control included the sharing of technical data with the Soviet Union to promote the idea that the United States was not interested in a nuclear monopoly and thus initializing the steps toward an arms race. He was also of a mind that one of the chief lessons was that it was not enough to build weapons—technocrats must learn how to use them properly. Roosevelt was of a

similar mind in this matter; Truman was quick to show that he was not. It became his personal mission to move Truman toward global cooperation and away from an "appalling prospect of an atomic arms race". Following Secretary of War Henry Stimson (whom Bush described as "the man with the greatest vision at the war department", Zachry 126), Secretary of State Byrnes was Bush's major ally and key influence in the White House, and it was Byrnes who reached out to Bush in October/November 1945 for the White House preparation for the next iteration of the Quebec Conference—the Attlee-King meeting (named for Prime Ministers Clement R. Attlee of Great Britain and Lyon Mackenzie King of Canada). Although Byrnes was keenly interested in establishing an American atomic monopoly, he was also interested in opening a dialogue with the Russians (Zachry p 303).

Bush's thinking was essentially a three-step plan: (1) invite the Soviets to join the Americans and the Russians to establish an international clearinghouse for information on atomic energy (a step which Bush thought would "cost us nothing " and "give us a chance to find out whether Russian really wants to proceed with us (Z303). This also followed from Stimson's 11 September plan that suggested a US/British direct approach to the USSR. (2) Inspection of all laboratories and industrial plants throughout the world that dealt with the materials that would go into the making of atomic weapons. (3) The final step forbade any nation from building or possessing bombs, with the US technology going towards the production of nuclear energy. He was however extremely cautious concerning the outlawing of the use of the bomb by the United States, which he thought should use a\it and use it promptly if the need ever arose. The plan was largely accepted by Byrnes on around 3 November and tacitly endorsed by Truman—largely due to the absence of another cogent plan was Bush's attempt at rewriting the atomic agreements with Britain and founding an official atomic policy. What resulted was something different from what was expected by Bush, and as he became more distanced from Byrnes, he commented on the "thoroughly chaotic" handling of the atomic policy by the administration. (Z304)

The Attlee-King conference, which would incorporate the new atomic policy, re-write the old atomic control initiatives of the 1944 meeting, and deal with the Russians, opened (in spite of the haste) smoothly on 11 November 1945. (Truman had addressed congress only a month early on 3 October saying that the international agreement on arms control could not wait until the UN was fully functioning). On 12 November Bush was again called by Byrnes to assist in the drafting of the conference communiqué. The 15 November Truman-Attlee-King Declaration called on the development of atomic programs for peaceful purposes—absolutely essential in this plan was the role of the United Nations to establish international controls, and essential to this plan was the UN establishing an organization to function as the inspecting agent. The final announcement was made 15 November, Truman reading from the Communique (as Bush stood quietly to one side) which called for the exchange of scientific information with any nation that would reciprocate, but stopped short of the sort of direct appeal to the Russians favored by Bush. Bush later recalled that the events leading to the Communique were very much like "Alice in Wonderland", and he was "appalled" at how badly the government had organized and carried out the whole affair. It was remarkable that Bush accomplished what he and his staff had set out to do, given how "completely disorganized and so irregular" the running of the affair was, an dhow "appalling it was to think of this country handling many matters in such an atmosphere" (Z306).

(This would be followed 24 January 1946 in the UN General Assembly approving a British resolution authorizing a committee on Atomic energy; Bernard Baruch would be the first US representative to this committee when it first met in June 1946). Byrnes established a special committee at this time to advise him on the atomic aspects of this interchange, headed by Dean Acheson, J.J. McCloy, Bush,

Conant and Groves, meeting for the first time 14 January 1946. This special committee decided in favor of a panel—the six members including Lillienthal, Barnard, Winne, Thomas and Oppenheimer, which would deliver a draft that would become the basis of the Acheson-Lillienthal report).

(5) Authors and Contributors of the Documents

BLANDY, William Henry Purnell (June 28, 1890 - Jan. 12,1954), naval officer, was born in New York City, the son of Charles Graham Blandy, a broker, and Elizabeth Harwood Purnell Blandy.. He graduated first in the class of 1913 at the U.S. Manal Academy, with awards for excellence in gunnery and ordnance. From 1938 to 1940 he commanded the former battleship Utah, which was in use as a mobile target and as an experimental ship for evaluating the Navy's antiaircraft needs. In 1940 he returned to the Bureau of Ordnance as a captain; early the following year he was named its chief and a rear admiral. He was a firm advocate of administrative decentralization, and under his leadership the bureau directed production of naval armaments as well as research and development of improved ammunition, guns, and fire-control systems. Although misfortune plagued the bureau's torpedo program, which produced a type of torpedo that too often failed to explode or exploded prematurely, antiaircraft development was highly successful, particularly with the adaptation an production of the foreign-designed Bofors and Oerliko guns and with the development of the VT (or proximity) fuse, which multiplied the effectiveness of antiaircraft defenses by eliminating the need for direct hits upon enemy planes.

At the end of 1943 Blandy left the Bureau of Ordnance for a flag command under the Fifth Amphibious Force of the Pacific Fleet, which was just beginning its Central Pacific offensive. He observed operations in the Marshall Islands early in 1944, led task groups in the Saipan and Ulithi operations later that year, and in 1945 commanded all pre-invasion activities at Iwo Jima and Okinawa, including bombardment, minesweeping, and underwater demolition. Respected by his superiors as an imaginative but thorough planner and as a resourceful, energetic combat leader, Blandy was designated Commander of Cruisers and Destroyers, Pacific Fleet, following the termination of operations on Okinawa.

With the war's end Blandy was promoted to vice admiral and made Deputy Chief of Naval Operations for Special Weapons, a newly created post charged with assessing the impact of atomic bombs, guided missiles, and other new weapons on the Navy's future. This work soon led to his appointment as head of the Joint Army-Navy Task Force that tested the effectiveness of atomic bombs against an array of veteran ships at Bikini Atoll in July 1946. The results of the tests were inconclusive but served the Navy's purpose by casting doubt upon the assertions of those Air Force partisans who regarded navies as outmoded. Promoted to four-star admiral in 1947 and named to command the Atlantic Fleet, Blandy was soon considered for assignment as Chief of Naval Operations, the Navy's highest position. He was one of three serious contenders for the post, but was bypassed in favor of Admiral Louis Denfeld, the compromise choice among the three.. Hewlett 471, 582

BUNDY, Harvey. War Dept's liason to VB on atomic and other matters. Steered a clear path for VB w/Army and Navy.

BYRNES, James. (1877-1972) A leading democrat for decades before the war and leading contender for the vice-presidency in 1940, Roosevelt offered Byrnes the post of director of economic stabilization, with responsibility for controlling prices and formulating a fair-minded tax program. Roosevelt added total industrial mobilization to Byrnes's portfolio by making him chairman of the new War Mobilization Board. He now virtually ran the economy of the country and the press tagged him

the "assistant president." Byrnes had promised to lead the Office of War Mobilization and Reconversion until the invasion of Germany. In February 1945, FDR took Byrnes with him to the Yalta Conference where Byrnes took shorthand notes on what he observed. However, he was not included in key negotiations. When Roosevelt died and Truman became president, what transpired at Yalta loomed as critically important and so did Byrnes's notes. Truman brought Byrnes in as secretary of state in June on the erroneous assumption that Byrnes knew and understood Roosevelt's plans for postwar peace. Thus, Byrnes became a major figure in the early Cold War years. He accompanied Truman to the Potsdam meeting; he also represented the United States at the London Conference of Foreign Ministers in September, the December Big Three foreign ministers' conference in Moscow which created the United Nations Atomic Energy Commission, and the United Nations organizational meetings in December 1945 and January 1946. He resigned in 1947. Byrnes went on to a senate career representing South Carolina and vehement segregationist Old South ideals, vigorously opposing civil rights legislation as well as equal pay standards for blacks.

DUNN, James C. "On 3 January [1945] Stimson and Bundy outlined the atomic project to the secretary of state. Stettinus was much impressed, and the three agreed that State's James C. Dunn should devote his attention to S1. This paved the way for a Bush conference wih Dunn on January 30. Bush outlined the international approach he and Conant had suggested to Stimson…" Hewlett, pg 335.

H(ARRISON), G(eroge) (L) (?) Considers Bush draft proposal, meets w/Blandy, Bush, Pasvolsky, Bohlen; Hewlett 463. 33-4, 107-8, 145-6, Smith; Featured prominently in photo "postwar planners" in Hewlett (pg 417), w/Genl Leslie Groves, JB Conant, Vannevar Bush, Aug 9, 1945. President of NY Life Insurance Company, was special consultant to Secretsary of State Henry Stimson, and was also part of the Combined Policy Committee (of which Bush and Stimson represented the United States) on control of atomic energy with the British and the Canadians.

HISS, Alger. (1904-1996) Hiss had been an a viser to Secretary of State Edward R. Stettinius at the Yalta Conference in February 1945, at which Roosevelt, Soviet leader Joseph Stalin, and British prime minister Winston S. Churchill had agreed to the partitioning of postwar Europe. Hiss had also been instrumental in the creation of the United Nations, including serving as the temporary secretary general at the San Francisco Conference in the spring of 1945. Yalta, especially, was made by Republicans into a symbol of everything they hated about Roosevelt's foreign policy. They charged that Roosevelt had betrayed Eastern Europe by permitting Stalin to establish Soviet-dominated regimes there. For the rest of the Cold War, Republicans would denounce the "crimes of Yalta." Nothing would fuel their resentments more than learning that a high American adviser at Yalta had been a Soviet spy. They conjured visions of Hiss standing behind a senile Roosevelt, whispering in his ear to sell out Eastern Europe. When Whittaker Chambers brought his allegations in 1948, Hiss was Prsident of the Carnegie Endowment for International Peace. On Int'l Control project, worked as aid to Asst Secy John H. Hilldring (with Herbert Marks) on passage of the Intl Control act, with AEC, in the UN, 1946. Hewlett, 609.

JOHNSON, Joseph E. Played role in enlisting Russian cooperation after the Attlee-King visit. Byrnes authorized Pasvolsky and Cohen to begin policy planning, including a nucleus of three: Carroll Wilson, Herbert Marks (special asst to Acheson), and Johnson, a Williams College history prof who became chief of State's Division of International Security Affairs (Hewlett 471). By Dec 7, it had draft proposals ready for consideration by a policy committee; by Dec 10 "something approaching a consensus emerged which the working committee sought to express in a revised draft of December 10" Hewlett 472). Johnson appears in a secret/declassified state department documen on a panel with

Vannevar Bush, John McCloy, Allen Dulles, and Robert Oppenheimer, April 1952.

KEFAUVER, Grayson. 1900-1946 London, with the rank of minister, as the American official liaison to CAME. His chief activity was to prepare for the Constitutional Conference for the agency ultimately called UNESCO.

McRAE, William A. (Colonel). Chair, Interdepartmental Working Committee on Atomic Energy Dec 1945

MORRISON, Philip. MIT Professor emeritus, physics, astrophysics.

NICHOLLS, Col (Manhattan, Hanford)

PASVOLSKY, Leo. (1893-1953) "Chief architect of the United Nations" according to Hewlett, pg 470, "one of the principal architects of the Dumbarton Oaks proposals for world peace" (Current Biography 1945); also, see declassified NSA documents, noted in presidential advisors' meetings, Oval Office, 1955; see also "Founding of the National Intelligence Structure, Aug 45--July 46, U.S. State Department, 11/27/45, meeting with the Secy State, Pasvolsky, Dunn."Byrnes was dependent on two old hands whom Cohen and Pasvolsky had brought to Washington as consultants, Henry Smyth and Robert Oppenheimer" Hewlett, 471. Secretary of State Cordell Hull's "closest advisors and editor in chief of his speeches and diplomatic memoranda" (Current Biography 1945). Later one of the leading thinkers for Hull's replacement Edwrad Stettinus. Significantly to this group of papers Pasvolsky accompanied President Roosevelt to the Quebec mweeting with Winston Churchill in which a (secret) joint atomic alliance was drawn between the U.S. and Great Britain.

In 1941 he became chief of the Division of Special Research and director of the Committee on Postwar Problems. Thus, long before the war ended, Pasvolsky began preparing the proposals for international organization that the United States woul make to other governments at Dumbarton Oaks in August 1944, where Pasvolsky was chairman of the Joint Formulations Group. When Stettinius succeeded Hull in December 1944, Pasvolsky's firsthand familiarity with plans for the United Nations and the International Court of Justice proved invaluable to the secretary. Pasvolsky applied his knowledge and goodwill in definitive ways at the San Francisco Conference in 1945. Pasvolsky was chairman of the Coordinating Committee on the wording of the United Nations Charter, and in this capacity gave the document its final form. He was a member of the Bretton Woods conference in 1946, and that year left the State Department to become director of international studies of the Brookings Institution

Executive Officer, Advisory Committee on Postwar Foreign Policies, organized by the State Department and the Council on Foreign Relations, with Cordell Hull as Chair. Dr. Pasvolsky also shows up in governmental discussions concerning monetary stabilization (repts from the Chair, Myron Taylor, Committee on Post-War Economic Policy, June 24, 1943).

PUTNAM, Parmerly C.

RABI, Isidor Isaac. (Nobel Prize in Physics, 1944)

SHOCKLEY, William. (1910-1989) (Nobel Prize, Physics, 1956, with Bardeen and Brittain) In 1940 he began working on the electronic design of radar equipment at a Bell Labs field station in New Jersey. From 1942 to 1944 he served as research director of the Antisubmarine Warfare Operations Research Group of the U.S. Navy, and from 1944 to 1945 he acted as a consultant to the Office of the Secretary of War. In 1946 the War Department awarded Shockley the Medal of Merit, the highest civilian decoration of that time.

Rabi and Shockley were also on a panel (in 1948) that would provide impartial evaluations of weapons, done under the JRBD, and which VB considered one of his greatest organizational efforts since the end of the war. (Z339). Also in this group was Bush's close and long time friend (and successor of the presidency of the Carnegie), and source of these documents, Caryl Haskins).

WILSON, Carroll L. Assistant to VB at NRDC to 1945; worked for Bush, who formed a group with Conant, Groves, McCloy and Acheson (Chair) to formulate US foreign policy regarding atomic weapons; worked as Secretary to Board of Consultants (Lillienthal, Chair), and wrote preliminary report for the material that would later be the Acheson-Lillienthal Report. First General Manager, Atomic Energy Commission, 1947. "The most crucial of the Bush consultants", Hewlett 605, and whom VB referred to as his "right hand man" Zachry 123, and "Bush's alter ego (James Phineas Baxter 3d). Photographed with "Lillienthal Board of Consultants at Oak Ridge, February 1946", with Oppenheimer, Charles Thomas, and Herbert Marks, Hewlett, p. 560.

(6) The Documents, in Outline, Chronological

Truman, Harry S Text of President's Navy Day Speech in Central Park in the Aims of U.S. Foreign Policy(#7) …

"Discussion of the atomic bomb with Great Britain and Canada and later with other nations cannot wait upon formal organization of the United Nations. These discussions, looking toward a free exchange of fundamental sci information, will be begun in the near future…these discussions will not be concerned with the processes of manufacturing the atomic bomb…. (pg 6). This announcement follows closely on the heals of Truman's first public statement of this decision of October 8. Truman also credited the intellectual architect of these statements as Bush—odd, since Bush had proposed just the opposite (Z 299). 45,Oct 27 Mimeo sheets, stapled. "The atomic bomb does not alter the basic foreign policy of the United States. It makes the development and application of our policy more urgent than could have been dreamed six months ago…it is the highest hopes of the American people…that atomic methods of destruction can be definitely and effectively outlawed forever…"

Shockley, William. (#1) On the Economics of Atomic Bombing 1945, 5pp, stapled offset/lithoprint (?) Evaluation of the economic fundamentals of atomic vs. conventional warfare, using (as one of the vectors) the cost of square mile destroyed". He figures atomic bombing to be about one-tenth of the cost of conventional bombing.

Rabi, I.I. The Atomic Bomb. (#29) 1945 1 pp, carbon. Seems to be an outline of a talk or presentation.

Source Material on Small "Piles" or Nuclear reactors…"In the Agreed Declaration it is Proposed to establish a wide exchange of scientists and scientific information…"(#16) Marked SECRET. 1945. 4to, 2pp, typed carbon sheets, SECRET. Marked "Hiss, #8" in pencil at top of document.

Bush, Vannevar. Dr. Bush's Memorandum of 3 November 1945 to the Secretary of State (#21) Marked SECRET. 1945, Nov 23. Establishes the "pertinent parts" 4pp, mimeo, stapled, "Secret" in the mimeo text, and stamped SECRET in red.

Byrnes, James. Text of Byrnes' Talk on Atom Bomb Control…UNO is Held Key to World Peace and Prosperity (#22) 1945, Nov 16 7pp, 4to, stapled mimeo sheets

Alternative Draft Proposals on Atomic Energy for Submission to U.S.S.R. (#2) [Later version,

Accompanies #3] WITH:

Draft Proposals on Atomic Energy for Submission to the U.S.S.R. [Later version of #3]

WITH:

Annex I Proposed Recommendations for the Establishment by the U.N. of a Commission to deal with the Problems raised by the Discovery of Atomic Energy and other Related Matters

SECRET 1945, October, late. 4to, 3pp+4pp+3pp. "V.B./G.H. Blandy's proposed state only first paper…" in pencil first sheet. "Such important matters as development and exchange of full knowledge concerning natural resources, exchange of technological and engineering info, and safeguards against and controls if methods of mass destruction present very troublesome questions, and the United States is not prepared to make proposals with respect to them. Refers (?) to the Truman statement of Oct0ber 8 declaring for the first time not to share the nation's atomic knowledge with the Russians (Zachry, 299).

Aide Memoire (#18) [Canadian response and suggestions to the United States Regarding Arms Control] 1945, Nov 30 4to, 4pp, stapled carbon sheets. (Pearson, Canadian Ambassador) Background material for the Truman-Attlee-Pearson report on International Cooperation, excluding France and SU). See Hewlett 467-9.

Draft Proposals on Atomic Energy for Submission to the U.S.S.R.. (#3)

WITH: Annex I [AN earlier, alternate to "Alternative Draft Proposals on Atomic Energy for Submission….", #2] 1945 4to, 4pp, stapled carbon sheets. "G.H. Blandy's proposal" in pencil on front cover.

Possibly made before the Truman statement of Oct 3, 1945.

Engineering and Technical Information (#9) Late 1945/ early 1946. 3pp, 4to, typed carbon sheets, (work sheet and background on the US Effort in Atomic power/weapons\

Engineering and Technical Information….(#10) 1945. 4to, 3pp. "The disclosure of engineering and technical information in this field is not considerable from the consideration of safeguards…"

Exchange of Scientific Information (#11) 1945 8vo, 4pp, stapled carbon sheets

Outline for Resume of Draft Convention (non-military use of atomic energy…and the threat of atomic weapons). (#12) 1945 9pp, stapled typed carbon sheets

Outline for Resume of Draft Convention (non-military use of atomic energy…and the threat of atomic weapons) (#13). 1945 9pp, stapled typed sheets, originals (??) of the above, with penciled annotations and correction in the hand of Caryl Haskins

Possibilities for Immediate Action Toward International Control of Atomic Weapons (#14) Marked SECRET. 1945. 8vo, 5pp, carbon typescripts, SECRET. "Mr. Dunn's complete plan".

Relation of UNESCO to Proposal for Scientific Exchange (#15), 1945. Carbon typescripts, 3pp, 4to; "CIC Grayson Kefauver and CA E.S. Brunauer"

Dunn, Frederick T. The Possibilities for Immediate Action Toward International Control of Atomic Weapons (#23)1945 5p, typed carbon sheets, stapled. Marked SECRET.

McRae, Col Exchange of Scientists and Scientific Information…. (#24) Marked SECRET. 1945.

"The Government of the United States considers that the Commission on Atomic Energy to be Established under the U.N. .as proposed…Nov 15, 1945…should submit recommendations along the following lines…"

Pasvolsky, Leo Memorandum for the Secretary on the Formation of the AEC. (#27) 1945, Nov29 2pp, typed, carbon, stapled. (Has the names "Mr. Johnson" and "I.S.")

Morrison, P(hilip). Some Features of the Problem of Inspection (#26) Marked SECRET. --This is a beautifully written, crisp and intelligent summation on the logic of inspection and atomic weapons control. 1945, Dec 123pp, 4to, typed carbons, SECRET. Morrison was working for Edward Teller's Theoretical Physics (Los Alamos) group at this time exploring the feasibility of a thermonuclear weapon. "The only work with important peacetime imp0lications was P.M.'s proposal for a ten-kilowatt power reactor fueled by plutonium and operated on fast neurons…on November 10, Morrison had begun a series of design conferences…" (Hewlett 627).

Draft of a Six-Point Plan to Prevent Atomic War. (#5) Sections include Defense Against Atomic Weapons; How Soon can Russia Manufacture her First Atomic Bombs?, and orhers. WITH: What Needs to be Done to Insure the Acceptance of the Plan (a) Domestically and (b) Abroad. December 1945. 9+4pp, typed carbons. Cover letter includes the names of Wilson, C.L., P.C. Putnam, Caryl Haskins, and is signed by Putnam. ALSO includes a section section that seems to be a way of presenting the plan to the public and the application of a PR campaign (?) The cover letter alludes to survey work to be done by Harry Field, Richardson (Dick) Wood, Fred Smith … The second section is very interesting, and addresses the Plan and the positioning of public opinion "and as to the types of persuasion likely to prove most effective" (pg 1). "Preliminary indications are that public support for such a program could be crystallized today under suitable leadership". Also discusses of Russia and the problems of acceptance of the Plan.

Wilson, Carroll L (On the Soviets and the Atomic Bomb) (#30) December, 1945. Stamped SECRET, 3pp carbon, stapled

Wilson, Carroll L. Memorandum on Exchange of Scientists and Scientific Information, (#32) Marked SECRET 1945, Dec. 1pp, carbon Role of the UNESCO…relating to the Development of Atomic Energy, document, 3pp carbon, stapled

Wilson, Carroll L. Recommendations for Annex II (#33) 1945, Dec 4pp, stapled. Carbon

Wilson, Carroll L. Research, Development, Production and Use of Atomic Energy for Peaceful Purposes…(#34)

Stamped SECRET 1945, Dec 2. . 6pp, typed carbon, stapled

Wilson, Carroll L. Exchange of Scientists and Scientific Information (#31) 1945, Dec 9 4to, 4pp, typed carbons, stapled.

Revised Draft of Proposals for Submission to USSR (#6) Stamped SECRET 3pp alternative to #2.December 1945, 4to, typed carbons, 3pp. SECRET. "WAM and JE J draft". Decemeber 10, 1945

JEJ=Joseph E. Johnson . whoplayed role in enlisting Russian cooperation after the Attlee-King visit. Byrnes authorized Pasvolsky and Cohen to begin policy planning, including a nucleus of three: Carroll Wilson, Herbert Marks (special asst to Acheson), and Johnson, a Williams College history prof who became chief of State's Division of International Security Affairs (Hewlett 471). By Dec 7, it had draft proposals ready for consideration by a policy committee; by Dec 10 "something approaching a consensus emerged which the working committee sought to express in a revised draft of December 10"

Hewlett 472).

Pasvolsky, Leo The Exchange of Scientific Information and the UNESCO… (#28) 1945, Dec 11On an int'l scientific agency "To Mr. Cohen, Mr. Secretary" 1pp, carbon typescript.

Wilson, Carroll L. Science in UNESCO, (#35) 1945, Dec 4pp, stapled, carbon.

Wilson, Carroll L. Memorandum on Exchange of Scientists and Scientific Information (#38) 1945, Dec 2 "The Objective of a Wide Exchange of Scientists and Scientific Information…"

Wilson, Carroll How Important is Time? (#37) SECRET 1945, Dec 19 8vo, carbon sheets, stapled. Committee suggests the timetable for the acquisition of the atomic bomb by the Soviet Union and its impact on the future of atomic weapons proliferation, balance of power, etc.

McRae, William A. Interdepartmental Working Committee on Atomic Energy (#25) 1945, Dec 18. Offset, stamped "CONFIDENTIAL", 1 leaf

Wilson, Carroll Detailed Questions Relating to Inspection as a Technical Problem.
SECRET 1945, Dec 22 8vo, 4pp, stapled mimeo sheets. SECRET.

Wilson, Carroll Detailed Questions Relating to Inspection as a Technical Problem (#36) 1945, Dec 29 8vo, 4pp, carbon sheets. "Replies of Col Nichols—Manhattan Hanford 12/29/45" in pencil on front. With: 2pp "Inspection" sheets

Aspects of the Development of Atomic Energy(#19) 1946 .Two versions: 1) 2pp typed and stapled sheets; the other (2) 2pp carbon typed, with annotations and the note "Outline for Armstrong Article…"

Statements Relating to the Commission on Atomic Energy (#17) 1946, January 14. Offset mimeo, USGA, AECom, 4to, 10pp, offset mimeo.

Draft Statement of the United States Position with Regard to Resolution Proposing Establishment of a Commission for the Control of Atomic Energy and other Related Matters. (#8)
Marked SECRET January 19,1946. Typed carbon sheets, 2pp. Has the name W. McRae association.

"The First Meeting of the Atomic Energy Commission was held June 14…" (#20) 1946 Two versions: 1), 1pp typed sheet, with numerous typed corrections; the second, (2), being the carbon of the corrected typed sheets. This presumably used at the US Rep level.

(7) The Documents, in Outline, Alphabetical:

Shockley, William	1	**On the Economics of Atomic Bombing**	1945/6,	5pp, stapled offset/lithoprint (?) Evaluation of the economic fundamentals of atomic vs. conventional warfare, using (as one of the vectors) the cost of square mile destroyed". He figures atomic bombing to be about one-tenth of the cost of

				conventional bombing.
	2	*Alternative Draft Proposals on Atomic Energy for Submission to U.S.S.R*. [Later version, Accompanies #3] WITH*:* *Draft Proposals on Atomic Energy for Submission to the U.S.S.R.* [Later version of #3] WITH: *Annex I Proposed Recommendations for the Establishment by the U.N. of a Commission to deal with the Problems raised by the Discovery of Atomic Energy and other Related Matters* **SECRET**	1945, October, late	4to, 3pp+4pp+3pp. "V.B./G.H. Blandy's proposed state only first paper…" in pencil first sheet. SECRET "Such important matters as development and exchange of full knowledge concerning natural resources, exchange of technological and engineering info, and safeguards against and controls if methods of mass destruction present very troublesome questions, and the United States is not prepared to make proposals with respect to them Refers (?) to the Truman statement of)ct0ber 8 declaring for the first time not to share the nation's atomic knowledge with the Russians (Zachry, 299).
	3	Draft Proposals on Atomic Energy for Submission to the U.S.S.R.. WITH*: Annex I* [AN earlier, alternate to "Alternative Draft Proposals on Atomic Energy for Submission….", #2]	1945	4to, 4pp, stapled carbon sheets. "G.H. Blandy's proposal" in pencil on front cover. Possibly made before the Truman statement of Oct 3, 1945.
	8	*Draft Statement of the United States Position with Regard to Resolution Proposing Establishment of a Commission for the Control of Atomic Energy and other Related Matters*. **SECRET**	1946, January 19	Typed carbon sheets, 2pp Marked SECRET. Has the name W. MCRae association.
	9	**Engineering and Technical Information**	1945/6	3pp, 4to, typed carbon sheets, 1945/6. (work sheet and background on the US

				Effort in Atomic power/weapons)
	10	*Engineering and Technical Information….*	1945	4to, 3pp. "The disclosure of engineering and technical information in this field is not considerable from the consideration of safeguards…
	11	**Exchange of Scientific Information**	1945	8vo, 4pp, stapled carbon sheets
	12	*Outline for Resume of Draft* Convention (non-military use of atomic energy…and the threat of atomic weapons).	1945	9pp, stapled typed carbon sheets
	13	*Outline for Resume of Draft Convention* (non-military use of atomic energy…and the threat of atomic weapons).	1945	9pp, stapled typed sheets, originals (??) of the above, with penciled annotations and correction in the hand of Caryl Haskins
	14	*Possibilities for Immediate Action Toward International Control of Atomic Weapons* **SECRET**	1945	8vo, 5pp, carbon typescripts, SECRET. "Mr. Dunn's complete plan".
	15	*Relation of UNESCO to Proposal for Scientific Exchange*	1945	Carbon typescripts, 3pp, 4to; "CIC Grayson Kefauver and CA E.S. Brunauer"
	6	Revised Draft of Proposals for Submission to USSR **SECRET** 3pp alternative to #2.	1945, Dec	4to, typed carbons, 3pp. SECRET. "WAM and JE J draft". Decemeber 10, 1945 JEJ=Joseph E. Johnson **JOHNSON**, Joseph E. Played role in enlisting Russian cooperation after the Attlee-King visit. Byrnes authorized Pasvolsky and Cohen to begin policy planning, including a nucleus of three: Carroll Wilson, Herbert Marks (special asst to Acheson), and Johnson, a

				Williams College history prof who became chief of State's Division of International Security Affairs (Hewlett 471). By Dec 7, it had draft proposals ready for consideration by a policy committee; by Dec 10 "something approaching a consensus emerged which the working committee sought to express in a revised draft of December 10" Hewlett 472).
	16	*Source Material on Small "Piles" or Nuclear reactors…"In the Agreed Declaration it is Proposed to establish a wide exchange of scientists and scientific information…"* **SECRET**	1945	4to, 2pp, typed carbon sheets, SECRET. "Hiss, #8"
	17	*Statements Relating to the Commission on Atomic Energy*	1946, January 14	Offset mimeo, USGA, AECom, 4to, 10pp, offset mimeo.
	18	**Aide Memoire** [Canadian response and suggestions to the United States Regarding Arms Control]	1945, Nov 30	4to, 4pp, stapled carbon sheets. (Pearson, Canadian Ambassador) Background material for the Truman-Attlee-Pearson report on International Cooperation, excluding France and SU). See Hewlett 467-9.
	19	**Aspects of the Development of Atomic Energy**	1946	Two versions: 1) 2pp typed and stapled sheets; the other (2) 2pp carbon typed, with annotations and the note "Outline for Armstrong Article…"
	20	*"The First Meeting of the Atomic Energy Commission was held June 14…"*	1946	Two versions: 1), 1pp typed sheet, with numerous typed corrections; the second, (2), being the carbon of the

				corrected typed sheets. This presumably used at the US Rep level.
Bush, V	21	*Dr. Bush's Memorandum of 3 November 1945 to the Secretary of State* **SECRET**	1945, Nov 23	Establishes the "pertinent parts" 4pp, mimeo, stapled, "Secret" in the mimeo text, and stamped SECRET in red.
Byrnes	22	*Text of Byrnes' Talk on Atom Bomb Control…UNO is Held Key to World Peace and Prosperity*	1945, Nov 16	7pp, 4to, stapled mimeo sheets
Dunn, Frederick T.	23	*The Possibilities for Immediate Action Toward International Control of Atomic Weapons* **SECRET**	1945	5p, typed carbon sheets, stapled. SECRET
McRae, Col	24	*Exchange of Scientists and Scientific Information….* **SECRET**	1945	"The Government of the United States considers that the Commission on Atomic Energy to be Established under the U.N. ..as proposed… Nov 15, 1945…should submit recommendations along the following lines…" SECRET
McRae, William A.	25	*Interdepartmental Working Committee on Atomic Energy*	1945, Dec 18	Offset, stamped "CONFIDENTIAL", 1 lf
Morrison, P(hilip)	26	**Some Features of the Problem of Inspection** **SECRET** --This is a beautifully written, crisp and intelligent summation on the logic of inspection and atomic weapons control.	1945, Dec 12	3pp, 4to, typed carbons, SECRET. Morrison was working for Edward Teller's Theoretical Physics (Los Alamos) group at this time exploring the feasibility of a thermonuclear weapon. "The only work with important peacetime imp0lications was P.M.'s proposal for a ten-kilowatt power reactor fueled by plutonium and operated on fast neurons…on November 10, Morrison had begun a

				series of design conferences…" (Hewlett 627).
Pasvolsky, Leo	27	*Memorandum for the Secretary on the Formation of the AEC.*	1945, Nov29	2pp, typed, carbon, stapled. (Has the names "Mr. Johnson" and "I.S.")
Pasvolsky, Leo	28	*The Exchange of Scientific Information and the UNESCO…*	1945, Dec 11	On an int'l scientific agency "To Mr. Cohen, Mr. Secretary" 1pp, carbon typescript
Rabi, I.I.	29	*The Atomic Bomb.*	1945	1 pp, carbon. Seems to be an outline of a talk or presentation.
Truman	7	Text of President's Navy Day Speech in Central Park in the Aims of U.S. Foreign Policy… "Discussion of the atomic bomb with Great Britain and Canada and later with other nations cannot wait upon formal organization of the United Nations. These discussions, looking toward a free exchange of fundamental sci information, will be begun in the near future… these discussions will not be concerned with the processes of manufacturing the atomic bomb…. (pg 6). This announcement follows closely on the heals of Truman's first public statement of this decision of October 8. Truman also credited the intellectual architect of these statements as Bush—odd, since Bush had proposed just the opposite (Z 299).	45,Oct 27	Mimeo sheets, stapled. "The atomic bomb does not alter the basic foreign policy of the United States. It makes the development and application of our policy more urgent than could have been dreamed six months ago…it is the highest hopes of the American people…that atomic methods of destruction can be definitely and effectively outlawed forever…"
	5	*Draft of a Six-Point Plan to Prevent Atomic War*. Sections include Defense Against Atomic Weapons; How Soon can Russia Manufacture her First Atomic Bombs?, and orhers.	45, Dec	9+4pp, typed carbons. Cover letter includes the names of Wilson, C.L., P.C. Putnam, Caryl Haskins, and is signed by Putnam.

		WITH: What Needs to be Done to Insure the Acceptance of the Plan (a) Domestically and (b) Abroad.		ALSO includes a section section that seems to be a way of presenting the plan to the public and the application of a PR campaign (?) The cover letter alludes to survey work to be done by Harry Field, Richardson (Dick) Wood, Fred Smith … The second section is very interesting, and addresses the Plan and the positioning of public opinion "and as to the types of persuasion likely to prove most effective" (pg 1). "Preliminary indications are that public support for such a program could be crystallized today under suitable leadership". Also discusses of Russia and the problems of acceptance of the Plan.
Wilson, Carroll L .	30	*(On the Soviets and the Atomic Bomb)* **SECRET**	45, Dec	Stamped SECRET, 3pp carbon, stapled
Wilson, Carroll L.	31	*Exchange of Scientists and Scientific Information*	1945, Dec 9	4to, 4pp, typed carbons, stapled
Wilson, Carroll L.	32	*Memorandum on Exchange of Scientists and Scientific Information*, **SECRET**	1945, Dec	1pp, carbon Role of the UNESCO…relating to the Development of Atomic Energy. SECRET document, 3pp carbon, stapled
Wilson, Carroll L.	33	**Recommendations for Annex II**	1945, Dec	4pp, stapled. Carbon
Wilson, Carroll L.	34	*Research, Development, Production and Use of Atomic Energy for Peaceful Purposes…* **SECRET**	1945, Dec 2	Marked SECRET. 6pp, typed carbon, stapled

Wilson, Carroll L.	35	Science in UNESCO,	1945, Dec	4pp, stapled, carbon
Wilson, Carroll	36	*Detailed Questions Relating to Inspection as a Technical Problem*	1945, Dec 29	8vo, 4pp, carbon sheets. "Replies of Col Nichols—Manhattan Hanford 12/29/45" in pencil on front. With: 2pp "Inspection" sheets
Wilson, Carroll	4	Detailed Questions Relating to Inspection as a Technical Problem. **SECRET**	1945, Dec 22	8vo, 4pp, stapled mimeo sheets. SECRET.
Wilson, Carroll	37	**How Important is Time?** **SECRET**	1945, Dec 19	8vo, carbon sheets, stapled; SECRET. Committee suggests the timetable for the acquisition of the atomic bomb by the Soviet Union and its impact on the future of atomic weapons proliferation, balance of power, etc.
Wilson, Carroll L.	38	*Memorandum on Exchange of Scientists and Scientific Information*	1945, Dec 2	"The Objective of a Wide Exchange of Scientists and Scientific Information…"