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TERRORISM BY THE BOMB: A NATIONAL PERSPECTIVE FOR THE YEAR 1975

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ABSTRACT

This paper attempts a rudimentary analysis of bomb data collected by the F.B.I.'s National Bomb Data Center during the Year 1975. It concludes that crude non-military explosive devices with "little inherent" knockdown or killing power were commonly utilized. "Psychic Terror" rather than killings or maimings was the most common result of the bombings. The Pacific, East North Central and South Atlantic regions experienced considerably more bombings than their regional counterparts, while the New England, West North Central and East South Central regions experienced the fewest incidents. However, bomb rate data reveals that the Pacific and South Atlantic regions experienced below average bomb rates, while the Mountain, New England, Middle Atlantic, and East North Central regions experienced above average bomb rates. The most highly urbanized and industrialized states were also the states with the most bombing incidents. The motive was unknown in approximately 78 per cent of the bombing incidents. However, when the motive was determined, extremist motives accounted for almost 50 per cent of the known motives. No single motive was highly related to killings, but "extremist" activity appears to be more highly correlated than any other single motive category. Killings were highly related to the use of explosives. Explosives appeared to be more closely associated with killings, injuries, and property damage than were flammable liquids. The largest number of bombing incidents during the year 1975 (in the U.S.A.) took place in cities with populations of under 25,000.

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INTRODUCTION

This study attempts a rudimentary analysis of data collected by the F.B.I.'s National Bomb Data Center during the year 1975. It is a prelude to a more comprehensive study underway and currently being written by the senior author of this article.

Terrorism by the bomb has probably been with us for as long as gun powder has been utilized in the West. The National Institute of Law Enforcement and Criminal Justice report, entitled *Arson, Vandalism and Violence: Law Enforcement Problems Affecting Fire Departments* acknowledges that "the use of bombs for violence has been known since the revolutionary days of Czarist Russia, but in the United States, their use has only become widespread since the rise of the civil disorders in the late 1960's." [1, p. 55] However, I would contend that the anarchist philosophy of "propaganda by the deed" exemplified in the writings and actions of Western European and North American anarchists of the nineteenth century stand in direct contradiction to the NILECJ report previously cited; for John Most (Laqueur, 1977) and other North American and European anarchists sincerely believed that explosives were the great equalizer, and were not opposed to utilizing them [2]. However, the systematic attempt to record and analyze the occurrence of bombing incidents is fairly new; i.e., 1968 marks the year that the Justice Department began its systematic recording and analysis of bomb data; while the F.B.I.'s initial systematic involvement was even more recent; i.e., 1974.[1] Thus, one can state that the scientific analysis of data associated with illegal bombings is a new and exciting field which beckons criminologists and geographers to get involved.

One should note in this regard that the F.B.I. National Bomb Data Center issues bomb data information on three levels; the most detailed is available only to Justice Department officials (as well as other upper level Federal officials). This level not only gives temporal and spatial information in regard to the specific bomb incidents, but also information about the technical composition of the devices and SES background information on the bomber. The second level of information is non-classified and less detailed than the previously cited level. This level is available to municipal and state level police administrators and bomb disposal technicians. The third level of information the one utilized by us, is available to

[1] Bomb data had previously been collected in a rather non-systematic manner; e.g., various municipalities collected such data as did numerous state agencies as well as the U.S. Department of the Army.

academics and other interested citizens. These data should be accurate in regard to the spatial and temporal aspects of the bombings. It also provides limited SES data on the bombers. In brief, it is theoretically an accurate assessment of the incidents in question, but is presented in a manner which would not compromise the judicial process. One must also be cognizant of the more detailed but preliminary nature of these monthly reports when comparing them to annual reports.

This specific study takes cognizance of micro- and macro-level spatial and non-spatial data associated with bombings within the United States during the year 1975. One should note that the findings presented here do not fully agree with those summarized in the annual report issued by the F.B.I.'s National Bomb Data Center. The discrepancies which exist are due to factors inherent in the data collection system used; i.e., the data presented here was extracted from the monthly "public reports" issued by the F.B.I. National Bomb Data Center [3]. After reading and rereading each report, we attempted to systematically fit the occurrences into the classification system developed and utilized by the F.B.I. National Bomb Data Center. We did not always agree with the classification chosen by the F.B.I.; i.e., if the incident based on data available to us was not clearly extremist, we did not list it as extremist.

Our perspective as criminologists trained in the orientation and methodology of social ecology and urban geography, is not only to study the social-psychological/technological manifestation of the act, but its spatial manifestation as well. Our goal is, in part, to gain a more comprehensive understanding of the motives, methods, and targets associated with illegal bombings while noting if regional differences in target, motive, method, and demographics exist in the spatial manifestation of these illegal bombings; that is, e.g., are terrorist bombings more common in the West than in the East, and are towns of a given population size more likely to experience illegal bomb incidents than towns of a different population size, and if so, why?

In brief, this study is from both a spatial and a criminological perspective, in that the regionalization of targets, motives, methods, bomb type and demographics are noted while explanations for the variance in regional manifestation are sought.

DEVICES AND TYPES UTILIZED BY BOMBERS: A NATIONAL PERSPECTIVE

F.B.I. data catalogued devices into sixteen possible categories, see Table 1. All but seven of these device categories can be

Table 1. Type of Bomb by Device (Shows Actual Number)

	Explosive	*Incendiary*	*Hoax*	*Booby-trap*	*Flammable liquid*	*Explosive-incendiary*	*Total*
Black Powder	13						13
Dynamite	92		7	4			103
Military Explosives	45						45
Military Ordinance	35	1			1		37
Smokeless Powder	18			1			19
Letter	1		7				8
Molotov Cocktail		1	1		164	1	167
Improvised Explosive	203	6	97	3	1	9	319
Clockwork-Delayed Fuse	21	4	2				27
Pipe Bomb	232		4	1			237
Fire Bomb		209					209
Suspicious Package	7		10	2			19
Blasting Caps	17	1					18
Undetermined	263	113	15	10		4	405
Other	29	9	1		1		40
Unknown	38		1	1		1	41
Total	1014	344	145	22	167	15	1707
	59.4%	20.1%	8.5%	1.3%	9.8%	0.9%	100%

Table 2. Device by Damage

	Most frequently used bombing devices					
	IED[a]	*Fire Bomb*	*Pipe Bomb*	*Molotov Cocktail*	*Dynamite*	*Undetermined*[b]
Damage	97	128	118	84	53	284
	11.0	14.5	13.4	9.5	6.0	32.3
No Damage	191	57	71	61	46	91
	29.6	8.9	11.0	9.5	7.1	14.1
Per cent Resulting in Damage	33.7	69.2	62.4	57.9	53.5	75.7

[a] Improvised explosive device.
[b] We cannot determine the types of device from the available data.
Note: Per cent of incidents resulting in damage when each device category is examined.

classified as explosives; only two can be clearly classified as combustibles.

As might be expected, the category "undetermined" led all categories for frequency of incidents listed, with 405 or 23.7 per cent of the total number of incidents.[2] This category was followed by pipe bomb, fire bomb, molotov cocktail homemade bomb, and dynamite, respectively, see Table 2. Of special note is the fact that when the device was determined, crude non-military devices with "little inherent" knockdown or killing power were commonly utilized. It is also important for us to take cognizance of the frequent use of flammable liquids or incendiary devices which was previously observed by the authors in their study of bombings and threats in the City of Dallas for the year 1975 [4].

The use of such devices as flammable liquids, incendiaries, and other devices with "little inherent" killing power might indicate an inability to purchase more potent materials, a lack of sophistication in the knowledge of storing and utilizing high explosives, and/or a desire to create "psychic terror" rather than to kill, maim, or cause extensive physical damage to property and/or the person.

In brief, psychic terror had been accomplished, with limited loss of life and/or property. The intensive surveying of persons arrested for bombings might supply answers in regard to the real motive behind a given incident; e.g., the fire bombing of a grocery store or

[2] One would expect this category to rank number one in that the bomb device can be totally destroyed or scattered during detonation or the subsequent destruction or clean up.

some other retail outlet might have been coupled with a telephone or written message demanding an "exploitation tax" on white merchants in a non-white neighborhood if that facility was to remain operative. Or perhaps the oral or written message demanded the firing of white employees and the hiring of non-whites. Variations on this scenario could continue ad infinitum. The essence of the argument in support of psychic terrorism rather than physical destruction is that the goal of the terrorist is not to destroy (the retail outlet in our scenario) but rather to coerce a change in the employment practices of an "exploitive" institution or to profit from the perceived profiteer.

It should also be observed that the F.B.I. classified types of bombs into six crude categories, see Table 1. Table 1 revealed that crude explosive devices were utilized more often than any other type of bomb and that incendiaries, flammable liquids, and bombs which combined explosives and incendiaries ranked second, third, and sixth respectively. This discovery clearly conflicts with the findings of our Dallas study which showed a strong correlation between the use of fire bombs (of various types) and actual bombing incidents [3]. This discrepancy might indicate that Dallas is atypical of the national pattern or that certain regions, such as the Pacific and East North Central, account for so many incidents that they determine the "national pattern;" i.e., the number of bomb incidents in these regions is so great that they have a disproportionate effect upon the statistical determination of what is "typical" nationally. However, in reality, there is no typical bombing device utilized on a national basis; but device selection differs from region to region and city to city.

Device by Region

Illustrative studies are typically classified into six categories by social geographers. Regionalization studies are one of these categories, the others being spatial distributions and interrelationships, circulation, central-place systems, diffusion, and environmental perception [5]. This study applies to F.B.I. bomb data regional classification of the United States, as determined by the U.S. Bureau of the Census, population statistics [6].[3] Our goal in this

[3] The Bureau of the Census, Department of Commerce has divided the United States into four basic regions (The Northeast, North Central, South, and West) which are further subdivided into nine sub-regions (New England, Middle Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain and Pacific). This study applies the Bureau of the Census sub-regional classification scheme.

section is to determine whether or not an extensive degree of homogeneity in device utilization can be noted within these census regions; i.e., whether we can determine the dominance in the use of one device rather than another in the various census regions. Our secondary goal was to determine a new regional grouping of states based upon frequency of incidents and/or device utilized, if the previously cited Bureau of Census classification proved to be of little utility.

The Bureau of the Census subdivides the United States into nine regions, see Table 3. All nine regions experienced bombing incidents. The Pacific, the East North Central and the South Atlantic regions experienced considerably more incidents than their counterparts (i.e., 28.3, 16.3 and 16.1% respectively, comprising over 60% of the nation's total number of bombing incidents in 1975). However, the standardization of population by bombings reveals a rather startling finding; i.e., that neither the Pacific nor the South Atlantic regions appears to manifest an excessive frequency of bombings. In fact, both regions fall well below the 1.8/100,000 population "regional bombing average."

I would speculate that the Pacific region's 0.6 bombing incidents per 100,000 population would surprise most criminologists as well as the general populace. For such cities as Los Angeles, Oakland, San Diego, San Jose, San Francisco, and Berkeley probably conjure up the image of student radicals, right-wing extremists, and non-descript crazies of every political, social, and religious persuasion.

California's numerous urban centers may also be associated in the public's mind with bombings and terrorism. Alaska, Hawaii, Oregon, and Washington, like California, are known for their urban centers and liberal life style (a possible misconception rooted in the public's ignorance of this region's history—for were not Oregon and Washington strongholds of the "second" Klu Klux Klan and virulent anti-Oriental xenophobia; i.e., the Kearneyist movement and the World War II internment of the Japanese American).

In brief, this region is probably viewed by both the public as well as by criminal justice practitioners as having the diverse population and urban concentrations as well as extremist ideologies to foster terrorism by crazies, crusaders, martyrs, radicals, and common criminals.

I would also speculate that the South Atlantic's relatively low 1.2/per 100,000 population "bombing rate" would probably surprise criminal justice practitioners. For the Old South has suddenly moved with a vengeance into the heavily urbanized and industrialized Twentieth Centruy. It is also the center of the "post

Table 3. Region by Motive by Type of Bomb

Region	Who (Motive)					Type of bomb						Total	
	Extremist	Profit	Fun	Other	Unknown	Explosive	Incendiary	Hoax	Booby Trap	Flammable Liquid	Explosive-Incendiary	Number	Percentage
New England	4	1	1	2	50	27	20	0	3	7	1		
	6.9	1.7	1.7	3.5	86.2	46.5	34.5	0	5.2	12.1	1.7	58	3.4
Middle Atlantic	15	8	3	10	143	126	18	22	3	8	2		
	8.4	4.4	1.7	5.6	79.9	70.4	10.1	12.3	1.7	4.4	1.1	179	10.5
East-North Central	13	9	9	14	223	181	53	30	2	8	4		
	4.7	3.2	3.2	5.1	83.3	65.1	19.1	10.8	0.7	2.9	1.4	278	16.3
South Atlantic	27	14	4	22	208	156	60	30	1	27	1		
	9.8	5.1	1.5	8.0	75.6	56.7	21.8	10.9	0.4	9.8	0.4	275	16.1
East-South Central	4	1	2	4	64	37	24	4	1	9	0		
	5.3	1.4	2.7	5.3	85.3	49.3	32.0	5.3	1.4	12.0	0	75	4.4
West-South Central	9	7	5	9	87	59	27	13	1	17	0		
	7.7	6.0	4.3	7.7	74.3	50.4	23.1	11.1	0.9	14.5	0	117	6.8
Mountain	13	1	1	12	126	97	26	8	3	17	2		
	8.5	0.7	0.7	7.8	82.3	63.4	17.0	5.2	2.0	11.1	1.3	153	9.0
Pacific	32	13	10	20	408	227	92	34	6	70	4		
	6.6	2.7	2.1	4.1	84.5	57.3	19.1	7.0	1.3	14.5	0.8	483	28.3
West-North Central	4	3	1	5	76	53	24	4	2	5	1		
	4.5	3.4	1.1	5.6	85.4	59.6	27.0	4.5	2.2	5.6	1.1	89	5.2
Total												1707	100.0

Civil Rights Movement's" struggle for Black rights and women's rights as well as the focal point of worker radicalization and unionization in industries as diverse as residential and commercial construction and textile mills.

In brief, it, like the Pacific region, possesses all of the prerequisites for terrorism by the bomb; i.e., a large and diverse population dwelling in high density urban agglomerations, cultural and social organization conflicts between diverse racial and ethnic groups, unionization, plus the feminist challenge to the "macho"-oriented way of the Old South. Yet, these regions manifest a surprising low bomb rate/100,000 population. At this time, I can only speculate as to the reasons for this unusual showing: the answer to this dilemma may center around a gun culture rather than a "philosophy of the bomb." That is, individual and/or extremist motivations might be vented by means of "gun play" rather than by explosives or incendiaries; follow-up study might attempt to document the weapon preference exhibited in such incidents. Nineteen-seventy-five might have also been a year of relative calm in regard to labor/management disputes and political activism, within the bounds of these macro-level spatial units. However, the disputes of "everyday living" which result in residential bombings can be viewed as constants, regardless of the social environment which surrounds unique labor/management disputes or political turmoil. Thus, at this time, we offer no additional speculation in regard to the relatively low bomb rate (by 100,000 population) manifested within these spatial units.

New England's relatively impressive bomb rate of 2.1 incidents/100,000 population, and the Mountain region's extremely high bomb rate of 2.5 incidents/100,000 population certainly merits discussion. These regions probably are viewed by the public as our least urbanized, least industrialized, and most stable regions in regard to numerous socio-cultural variables; e.g., they are areas of ethnic/racial homogeneity, and respect for law and order. Yet these are areas with rather severe bombing rates. How does one account for this? Could a legacy of a "philosophy of the bomb" be tied to rural (and use practices) like the dynamiting by farmers and the use of dynamite by miners of stumps and bedrock, and could these practices be tied to the general dissemination of rudimentary knowledge in regard to the storage and discharge of explosives? That is, does the presence of a utilitarian history in regard to the legitimate storage and discharge of explosives result in a high bomb rate, and thus the converse result in a low bomb rate?

One other factor should be noted before we get into an analysis of device by census region. That factor is that of availability of explosives and combustibles. Combustibles such as kerosene and gasoline are readily available in all regions, but explosives and even the most rudimentary knowledge of how to use them safely is not. In fact, one might contend, without any hard data to support the contention, that a higher proportion of rural populations than their urban counterparts should possess rudimentary knowledge about the safe possession and discharge of explosives. This in part, was due to the common use of explosives by farmers to remove tree trunks and outcroppings of bedrock from fields, while miners often use explosives to reach and/or extract precious ores from the earth. Thus, an interesting question would be whether explosives are utilized in predominantly rural regions while combustibles are more frequently utilized in the more highly urbanized regions? A corollary to this question would be whether a fairly uniform culture of device utilization exists throughout the United States regardless of the degree of urbanization within specific regions?

Some geographers might contend that although the two questions raised in the preceding paragraph, are indeed fascinating ones, the real issue is that of scale; i.e., the regional or state level of analysis is too macro, too crude, and distorts the "true" process of device utilization within target areas. That the incident might best be studied on the basis of an urban-rural classification scheme regardless of the region in which the incident occurred. We have considered the merit of such a critique and have opted to contend with the issue raised by it in a forthcoming section, labelled "Frequency of Device (Utilization) by (Urban) population (size)."

Nonetheless, it is our belief that the regional/state level of analysis is a valid and useful one. Although the question of culture transfer remains open; i.e., people in predominantly rural regions (e.g., mining and farming regions) are in theory more likely to learn the skills necessary for the safe utilization and/or storage of explosives. In fact, they are more likely to entertain the possibility of utilizing such substances because it is within their "mind set" of what is familiar and that "mind set" travels with them regardless of the degree of urbanization which demarcates their environs.

Table 4 indicates the devices utilized in the four regions which experienced the most bombing incidents, as well as the two regions which experienced the fewest bombing incidents; this table also reveals the bomb rate by region standardized by population. Perhaps the most interesting finding is that explosive devices ranked

Table 4.

Population by Region	Number of Incidents	Number of Incidents per 100,000 Population	Type of bomb: Explosive	Incendiary	Hoax	Booby Trap	Flammable Liquid	Explosive Incendiary	Per cent of Total
1. Mountain			97	26	8	3	17	2	
	153	2.5	63.4	17.0	5.2	2.0	11.1	1.3	9.0
2. New England			27	20	0	3	7	1	
	58	2.1	46.5	34.5	0.0	5.2	12.1	1.7	3.4
3. Middle Atlantic			126	18	22	3	8	2	
	179	2.1	70.4	10.1	12.3	1.7	4.4	1.1	10.5
4. East North Central			181	53	30	2	8	4	
	278	2.1	65.1	19.1	10.8	0.7	2.9	1.4	16.3
5. West North Central			53	24	5	2	5	1	
	89	1.9	59.6	27.0	4.5	2.2	5.6	1.1	5.2
6. East South Central			37	24	4	1	9	0	
	75	1.8	49.3	32.0	5.3	1.4	12.0	0.0	4.4
7. West South Central			59	27	13	1	17	0	
	117	1.8	50.4	23.1	11.1	0.9	14.5	0.0	6.8
8. South Atlantic			156	60	30	1	27	1	
	275	1.2	56.7	21.8	10.9	0.4	9.8	0.4	16.1
9. Pacific			227	92	34	6	70	4	
	483	0.6	57.3	19.1	7.0	1.3	14.5	0.8	28.3
Average Number of Bombing Incidents/100,000 Population		1.8							

first in regard to device utilization regardless of region. It is also of interest to note that a clear positive association with explosive bombing devices in regions with a relatively rural non-industrial orientation does not appear to exist; similarly, a strong positive correlation with devices which utilize incendiaries or flammable liquids in highly urbanized and/or industrial states is also absent. Such findings tend to support our earlier speculation in regard to a rather generalized bomb culture in regard to weapon selection.

If we attempt the secondary goal which we established for this section; i.e., the determination of a new regional grouping of states based upon frequency of incidents and/or devices utilized rather than contiguous space, we establish a very different four-part regionalization scheme. This regional scheme is presented in Table 6.

The perusal of Table 6 reveals that California is unique in regard to frequency of bomb incidents. Further research is necessary in order to identify those socio-behavioral dynamics which result in bombings; such research would also attempt to note whether those socio-behavioral dynamics are unique to California or merely more highly concentrated there than elsewhere; e.g., are most of the California bombings motivated by extremist motives and are these motivations more common in California than other states. Perhaps one might ask if California has more towns with a population under 25,000 than other states and thus manifests more illegal bombings.

One can note that the states displayed are America's most highly

Table 5. The Ten Most Populous States by Number of Incidents by Rate Per 100,000 Population

Ten most populous states		*Number of Bombings*	*Number of Incidents per 100,000*
State	*Population*		
1. California	21,185,000	411	.5
2. New York	18,120,000	83	2.1
3. Texas	12,237,000	71	1.7
4. Pennsylvania	11,827,000	40	3.0
5. Illinois	11,145,000	67	1.6
6. Ohio	10,759,000	122	.9
7. Michigan	9,157,000	54	1.7
8. Florida	8,357,000	102	.8
9. New Jersey	7,316,000	56	1.3
10. Massachusetts	5,828,000	38	1.5

Table 6. The Ten States With the Most Incidents by Rank

Rank	*State*	*Number of bombings*	*Per cent of total incidents*	*State population*	*State rank based upon frequency of incidents*	*Rank based upon bomb rate (incidents/ 100,000 population)*	*State rank based upon bomb rate/ population by national average*
1	California	411	24.1	21,185,000	1st.	.5	3rd.
2	Ohio	122	7.1	10,759,000	2nd.	.9	3rd.
3	Florida	102	6.0	8,356,000	2nd.	.8	3rd.
4	Maryland	92	5.4	4,098,000	2nd.	.4	3rd.
5	New York	83	4.9	18,120,000	3rd.	2.1	1st.
6	Colorado	76	4.5	2,534,000	3rd.	.3	3rd.
7	Texas	71	4.2	12,237,000	3rd.	1.7	3rd.
8	Illinois	67	3.9	11,145,000	4th.	1.7	3rd.
9	New Jersey	56	3.3	7,316,000	4th.	1.3	3rd.
10	Michigan	54	3.2	9,157,000	4th.	1.7	3rd.
11	All Other States	—	—	—	5th.	—	—
—	Pennsylvania	41	—	11,827,000	5th.	3.0	1st.
—	Illinois	67	—	11,145,000	4th.	1.6	3rd.
—	Massachusetts	38	—	5,828,000	5th.	1.5	3rd.

urbanized and industrial states. Yet all but two of these states have bomb rates (by 100,000 population) which are lower than their respective regional bomb rate.

In brief, this new regionalization scheme does place most of America's most highly urbanized and industrialized states in our top four bomb categories in regard to frequency of illegal bombings. Further research should attempt to note which socio-behavioral, economic, and political variables and processes are more common in those states which we've grouped in regions one through four than in region five and whether or not their frequency of occurrence decreases as one moves from category one through five.

Device by State

If the scale of our analysis is altered to that of the state, an extremely important factor is again highlighted. The most populous highly urbanized, industrialized states were also the states with the most bombing incidents, although they did not necessarily have the highest bomb rates (per 100,000 population) see Table 6.

This finding is surprising, since as previously mentioned, cities have long been depositories for new ideas and political and social unrest, as well as for migrants and immigrants undergoing the socio-cultural conflict of assimilation. It is a site where political as well as socio-cultural change is the norm rather than the exception.

Cities are also the focal point of mass culture and mass communication, the nexus for two or more cultures or societies straining to maintain the primary relationships of the past; i.e., the relatively simple existence of the rural folk society conflicting with the complex interrelationships of urban life (which are stigmatized by the maelstrom of secondary entanglements and limited loyalties). It is where heterogeneity and anonymity (and possible anomie) are the norm. It is where the rich and the super-rich brush shoulders with, or steal glances at, their poorer and less powerful counterparts. It is where the crazy, the pessimist, the ideologue, the revolutionary, the reactionary, the criminal, the weak, the passive, the violent, the sane, the insane, the powerful, and the powerless act out their sometimes bizarre drama of life and death. It is where they live, and love, and hate, and squabble and resolve problems in their own unique, and at times, violent way. It is, in short, "where the action is."

Table 7 reveals the relationship between the ten states which experienced the most bombings and the six most common types of devices utilized in those bombings.

Table 7. Devices Utilized

State ranked according to number of incidents	*1st*	*2nd*	*3rd*	*4th*	*5th*	*6th*	*Number of bombing incidents*
California	Und.	Molotov C.	Pipe Bomb	Fire Bomb	IED	Homemade	
	81/19.7	71/17.3	69/16.8	50/12.2	44/10.7	35/8.5	411
Ohio	Und.	Fire Bomb	Dynamite	Pipe Bomb	Homemade	IED	
	25/20.5	24/19.7	20/19.4	18/14.5	10/ 8.2	10/8.2	122
Florida	Und.	Fire Bomb	Homemade	IED	Dynamite	Pipe Bomb	
	31/30.4	12/11.8	11/10.8	8/ 7.8	7/ 6.9	5/4.9	102
Maryland	Fire Bomb	Molotov C.	Und.	Pipe Bomb	Homemade	M.O.[a]	
	23/25.0	13/14.1	11/12.0	10/10.9	9/ 9.8	6/6.5	92
New York	Und.	Pipe Bomb	Homemade	IED	Dynamite/Molotov Military Explosives		
	21/25.3	17/20.5	12/14.5	5/ 6.0	4/4.8		83
Colorado	Und.	Molotov	Fire Bomb	Homemade	Pipe Bomb/IED/Hoax		
	22/28.9	10/13.2	10/13.2	7/ 9.2	6/7.9		76
Texas	Molotov	Fire Bomb	Pipe Bomb	Und.	IED	Homemade[b]	
	13/18.3	9/12.7	9/12.7	9/12.7	8/11.3	4/5.6	71
Illinois	Pipe Bomb	Und.	IED	Homemade	Fire Bomb	Dynamite	
	23/34.3	10/17.9	9/16.1	6/ 9.0	4/7.1	3/5.4	67
New Jersey	Homemade	Und.	Pipe Bomb	IED	Fire Bomb	Military[c]	
	12/21.4	10/17.9	9/16.1	5/8.9	4/7.1	3/5.4	56
Missouri	Und.	Homemade	Pipe Bomb	Fire Bomb	Dynamite	IED	
	12/22.2	8/14.8	8/14.8	7/13.0	6/11.1	4/7.4	54

[a] Military Ordinance
[b] Smokeless Powder
[c] Military Explosive, Unknown

Of interest is the fact that either the fire bomb or molotov cocktail ranked as the first or second most commonly utilized device in all but three states (i.e., Illinois, New Jersey, and Michigan), all of which are extremely urbanized and industrialized. They are also stigmatized by the bomber's reliance upon crude explosive devices; i.e., the pipe bomb and the homemade bomb, a reliance which holds for most of the states cited in Table 7.

Future research is needed to further explore weapon preference and to determine whether or not weapon preference is tied to or masked by the unique features manifested by the target within each state, or whether weapon preference can be explained by population size (rather than urbanization or industrialization); i.e., do the more populous states manifest a certain weapon preference, for example, the fire bomb?

Another observation which emerged from our analysis was that the bombers relied heavily upon crude devices be they inflammatory, incendiary and/or explosive.

This finding might again indicate a lack of sophistication in possessing and utilizing sophisticated high explosives, a lack of contacts to purchase such explosives and/or a lack of money to purchase such explosive devices.

It might also indicate that psychic terror—rather than physical destruction of property or persons—was the goal. If this were the case, a less sophisticated device with limited knockdown power would be quite adequate. The section on "Object of Attack by Device" will deal more directly with the unresolved issues raised in this section.

One should note that the ten states with the highest incidence frequency were representatives of six of our nine regions. The three regions not represented in this "elite" company were New England, the West North Central, and East South Central, the three regions with the fewest bombing incidents (yet not necessarily the regions with the lowest bombing rates/100,000 population).

Who (Motive by State)

Our data reveal that the motive was unknown for 77.8 per cent of the incidents which occurred in the ten states with the most incidents. The second ranking category listed extremist[4] motives

[4] The category "extremist" includes all incidents with a political motive.

Table 8. Motive by State
(Ten Most Commonest States in Which Incidents Occurred)

State	Motive					Total	Rank
	1 Extremist	2 Profit	3 Fun	4 Other	5 Unknown		
California	22/ 5.4	12/2.9	8/1.9	18/4.4	351/85.4	411/24.1	1
Ohio	2/ 1.6	2/1.6	2/1.6	8/6.6	108/88.5	122/ 7.1	2
Florida	16/15.7	8/7.8	2/2.0	8/7.8	68/66.7	102/ 6.0	3
Maryland	3/ 3.3	0/0	3/3.3	7/7.6	79/85.9	92/ 5.4	4
New York	13/15.7	4/4.8	2/2.4	3/3.6	61/73.5	83/ 4.9	5
Colorado	8/10.5	0/0	0/0	4/5.3	64/84.2	76/ 4.5	6
Texas	5/ 7.0	5/7.0	3/4.2	5/7.0	53/74.6	71/ 4.2	7
Illinois	2/ 3.0	0/0	1/1.5	3/4.5	61/91.0	67/ 3.9	8
New Jersey	2/ 3.6	4/7.1	1/1.8	3/5.4	46/82.1	56/ 3.3	9
Michigan	4/ 7.4	5/9.3	5/9.3	3/5.6	37/68.5	54/ 3.2	10

for 10.6 per cent of our total; this figure accounted for 47.9 per cent of the motives when identified.

The third most common motive was our catch-all category, "other," accounting for 5.2 per cent of the total and 23.4 per cent of the known motives. The fourth most common motive was listed as profit with 3.4 per cent of our total and 15.1 per cent of the known motives. The fifth and least common motive identified in our table was that of fun; i.e., 3.0 per cent of the total or 13.6 per cent of the motive identifiable incidents, see Table 8.

Thus, one must conclude that extremist violence appears to be a fairly common motive behind bombings (when the motive is determined). We cannot, however, determine whether or not the extremists are of the left, the right, or perhaps both. It is of interest to note that extremist violence ranked first (or tied for first) as the most common single motive in five out of ten of the states which experienced the most bombing incidents; i.e., California, Florida, New York, Colorado and Texas. "Other" ranked (or tied for first) in three states; i.e., Ohio, Maryland, and Illinois. Profit ranked first (or tied for first in two states (i.e., New Jersey and Missouri); while fun tied for first in only one state; i.e., Missouri.

Further research is necessary if we are to discuss inferences from the information cited here. For example, one might attempt to

determine why extremist activity is more common in certain states than in others, when all of the states in question are highly urbanized and industrialized? Were certain states undergoing major housing, environmental, racial, or labor crises when the extremist incidents occurred? The answers to these questions, as well as others, are beyond the scope of this rudimentary pilot study of terror by the bomb. The authors, however, will attempt to explore these issues more fully in subsequent articles and book-length manuscripts. One cannot downplay the significant role extremist motives play in the illegal bombing of targets. One should, however, keep in mind the significant role fun and profit play in the motivation behind illegal bombings, factors often overlooked by the public.

THE ELEVEN MOST FREQUENT OBJECTS OF ATTACK BY THE SIX MOST FREQUENTLY UTILIZED BOMBING DEVICES

Table 9 reveals the eleven most frequent objects of attack in relationship to the six most frequently utilized bombing devices. One of the most interesting findings revealed by this Table is the non-centrality of focus on governmental objects as objects of attack. Table 10 reveals a simplified ranking of the most common objects of attack. Governmental objects ranked seventh and eighth, respectively, i.e., local government and federal government. Attacks against state government targets were relatively unusual. This finding is of special interest when one recalls the stereotyped public belief that anti-government revolutionists of the left are avid terrorists. (Such a belief also ignores or pleads ignorance of right-wing anti-Castro bombings of United States government property in the Miami region.) Residential structures ranked second in frequency as targets. This category also obtained a high ranking in our earlier study of bombings and bomb threats perpetrated in Dallas, entitled "The Study of Bombings, Incendiaries, and Bomb Threats in the City of Dallas for the Year 1975." [4] This finding is of special significance because the public is probably unaware of the frequency of what appear to be apolitical residential bombings.

Another important pattern revealed in Table 9 is the non-centrality of the capitalist-industrial complex as an object of attack. In fact, only one out of the ten most frequently listed object categories falls within the capitalist-industrial complex; i.e., commercial enterprise. Commercial enterprise includes a plethora

Table 9. Object of Attack by Device

Object of Attack	*Most frequently used bombing devices*					
	IED[a]	*Fire Bomb*	*Pipe Bomb*	*Molotov Cocktail*	*Dynamite*	*Undetermined*[b]
Commercial	69/24.6	33/11.7	31/11.0	18/ 6.4	18/6.4	79/28.1
Residential	28/10.2	64/23.4	25/ 9.0	49/17.9	15/5.5	68/24.8
Transportation (Vehicle)	32/16.9	16/ 8.5	19/10.1	23/12.2	18/9.5	46/24.3
Unknown	40/23.5	17/10.0	32/18.8	13/ 7.6	6/3.5	35/20.6
Educational Facilities	35/26.9	20/15.4	22/16.9	13/10.0	3/2.3	20/15.4
Undetermined[c]	13/17.6	2/ 2.7	17/23.0	2/ 2.7	6/8.1	3/ 4.1
Local Government	11/15.5	7/ 9.9	12/16.9	12/16.9	5/7.0	15/21.1
Federal Government	14/20.9	6/ 9.0	17/25.4	3/ 4.5	0/0	13/19.4
Individual Person	13/21.7	6/10.0	6/10.0	4/ 6.7	5/8.3	10/16.7
Entertainments	0/0	1/10.0	3/30.0	1/10.0	0/0	4/40.0
State Government	1/11.1	1/11.1	0/0	2/22.2	0/0	33/33.3

[a] Improvised Explosive Device.
[b] We cannot determine the types of device from the data available.
[c] Bombing device was discovered while investigating non-bomb related crimes.

Table 10. Object of Attack

Object of attack	*Rank by frequency of incidents*	*Number of incidents*	*Per cent of total*
Commercial	1	281	16.5
Residential	2	274	16.1
Transportation Vehicles	3	189	11.1
Unknown	4	170	10.0
Education Facilities	5	130	7.6
Undetermined[a]	6	74	4.3
Local Government	7	71	4.2
Federal Government	8	67	3.9
Individual Person	9	60	3.5
Entertainment	10	10	0.6
State Government	11	9	0.5

[a] Bombing device was discovered while investigating non-bomb related crimes.

of business activities ranging from the "ma and pa" storefronts to the American affiliates of international conglomerates. This, again, leads us to discount the importance of leftist terrorism with an ideological basis; i.e., Trotskyist, Maoist, Stalinist, or Blanquist orientation. (In fact, America's most "infamous" organization of so-called leftist terrorism by the bomb is the FALN, an organization whose primary goals appear to be more anti-colonialist and Pro-Puerto Rican nationalist than socialist, although it operates under the "banner" of Marxist-Leninism and nationhood for Puerto Rico.) More discussion of apparent motive will be found in the section entitled, "Object of Attack by Motive by Type of Bomb."

Thus, what is of special significance is the high ranking of such apolitical targets as residential structures, transportation vehicles, educational facilities, the individual person, and entertainment facilities. (Some might argue that the entertainment facility is a representative of the Industrial-Capitalist Complex.)

Cross-tabulations reveal that the various objects which were attacked were usually attacked by relatively crude bombing devices, a possible exception being the use of dynamite (a rather crude but powerful high explosive.)

If we note the most frequent device utilized within each target category, we are confronted with the fact that the device category "undetermined" ranked number one in 54.5 per cent of our cases. If we exclude the device category "undetermined," our data reveal that the pipe bomb was most frequently utilized within the given

object categories; i.e., it placed first three times and tied once with the Molotov cocktail for first place. Both the fire bomb and the Molotov cocktail placed first once while the Molotov cocktail also tied for first with the pipe bomb once.

The most frequent device utilized against commercial objects was the IED. The most frequent device utilized against residential property was the fire bomb followed by the Molotov cocktail. The most frequent device utilized against transportation vehicles was the IED. When the object of attack was listed as unknown, the most frequent device utilized against it was the IED, followed by the pipe bomb.

The most frequent device utilized against educational facilities was the IED followed by the pipe bomb and then the fire bomb. When the object of attack was listed as undetermined (which meant that the bombing device was discovered while investigating non-bomb related crimes) the most frequent device utilized was the pipe bomb followed by the IED. This finding was a surprise since one might have expected the criminal to make use of fire as a cloaking device.

The devices most frequently utilized against local government structures, when the device was known, were the pipe bomb and Molotov cocktail, which were tied for second. The most frequently utilized device against entertainment facilities was the pipe bomb followed by the fire bomb and Molotov cocktail (which were tied for second). And the device most frequently utilized against the state government was the Molotov cocktail, followed by the IED and fire bomb (which tied for second).

KILLINGS OR INJURIES BY THE MOST FREQUENTLY USED BOMBING DEVICES

Table 11 reveals that most bombings did not result in killings or injuries to the bombers or occupants of the target; i.e., 87.3 per cent of the bombings did not result in casualties. When casualties did result, injuries occurred about three times as frequently as did death. It is also important to note that when the bombing device could be determined and when a death resulted from the incident, one device was about as likely to have been utilized as another.

Table 11 also reveals that explosive devices appear to be more closely associated with injuries than devices which used incendiaries or flammable liquids; e.g., the Molotov cocktail. This is understandable when we take cognizance of the destructive nature of the

Table 11. Killings/Injuries by Device

	IED[a]	*Fire Bomb*	*Pipe Bomb*	*Molotov Cocktail*	*Dynamite*	*Undetermined*[b]	*Number*	*Percentage*
Killings	4/14.3	2/ 7.1	2/ 7.1	2/ 7.1	3/7.1	13/46.4	28	1.7
Injuries	16/19.5	4/ 4.9	14/17.1	4/ 4.9	5/6.1	23/28.0	82	4.8
None	282/18.9	187/12.5	195/13.1	150/10.1	93/6.2	349/23.4	1491	87.3
Not Given							106	6.2

[a] Improvised Explosive Device.
[b] We cannot determine the types of device employed from the data available.

Note: It is interesting to note that the most frequently utilized bombing devices that caused killings, injuries, and no killings and injuries remain the same and roughly constitute the same percentages of total incidents in each category. This could give a strong indication that the primary objectives of bombings were not to kill or injure people.

devices. The explosives result in damage to persons or property much more suddenly than their non-explosive counterparts—the fire bomb and Molotov cocktail and thus have great potential in maximizing casualties.

An especially interesting observation in regard to inflicting casualties is that explosive devices are usually hidden. Thus, the relatively infrequent kills and injuries associated with the discharge of these explosive devices strongly suggests a lack of desire on the part of bombers to kill or maim. Hence, psychic terror appears to be their goal—the destruction of the person is apparently not.

Fire bombs (i.e., incendiary and combination explosive-incendiary devices) might also be hidden, but often devices which utilize inflammatory liquids and incendiaries are tossed or projected: they are usually used against property, not persons, because of their limited immediate destructive propensities.

In closing, one should note that although explosive devices which utilized dynamite (a rather high intensity explosive) did result in a moderately high kill ratio, when compared with the other devices noted in Table 11, dynamite did not result in high injury ratio. This might indicate the selective use of this high explosive. One must also conclude from the relatively low number of casualties inflicted by this explosive, that the apparent objective of the bombings was not to inflict casualties.

In conclusion, it is important to be cognizant of the lack of "inherent" killing or knockdown power associated with most of the bombing incidents regardless of target. It is also important to note the absence of a strong correlation between the use of inflammatories and incendiaries against people (or targets which might "house" substantial numbers of persons) and explosives against property (or less heavily populated targets), or vice versa. Further research might explore the relationship between the device utilized, the time in which the incident occurred and the target of the attack. Such research might further the understanding of the real motivations and goals behind bombings. The time in which the bombing occurred might indicate a desire to do more than create a "climate" of fear, it might indicate a desire to reap death, maiming and destruction.

DEVICE BY DAMAGE

Table 2 reveals that damage resulted from over 50 per cent of the bombing incidents regardless of the type of device utilized, if IED's are excluded. This indicates that the IED, a crude explosive

Table 12. Motive of Attack

Motive (Who)	*Number of incidents*	*Per cent of total*
Extremist	121	7.1
Profit	57	3.3
Fun (excitement)	36	2.1
Other	98	5.8
Unknown	1395	81.7
Total	1707	100.0

device, either had little destructive potential or was utilized against targets in a manner from which little damage would result, or that the target was unlikely to be damaged; e.g., a bombing of a vacant lot. Such a bombing tactic might be employed to inflict fear; i.e., to force the victim to adhere to the will of the bomber, lest a more grievous act might occur; such a ploy might be used in an extortion (thus a bombing for profit).

Considerable care must be exercised when interpreting Table 2, in that the term damage is a rather nebulous one. Data are needed in a form which would indicate the extent of the physical damage as well as the potency of the bombing device. One must not exclude the possibility that an incident which resulted in no damage might have resulted thus by default. That is, the bomber might have wished to cause physical destruction but was unable to purchase or utilize high intensity explosives. Still another factor might have been the time of the day or night when the bombing device was used. A low intensity explosive should cause minor physical damage regardless of when it was utilized. However, the extent of damage which might result from the use of an inflammatory or incendiary is related in part to the amount of time between when it was set off and when it was discovered. Thus, the temporal factor should also be analyzed before one makes conclusive statements about the damage potential or relationship with that of the device utilized.

MOTIVE BEHIND THE BOMBING

Our data indicate that the motive behind the bombings was unknown in 81.7 per cent of the incidents, see Table 12. However,

when motive was determined, the most likely motive was aligned with some type of extremist motivation (in 121 incidents or 7.1 per cent of the incidents).

The second most frequent motivation not listed as "unknown" or "other" was profit (57 or 3.3% of the incidents). The third most frequent motive was fun (i.e., for excitement) which totaled 36 or 2.1 per cent of the incidents.

The term "extremist" includes radicals of both the left and the right. "Other" might include everything from revenge to the accidental discharge of an explosive.

Because of the very limited number of known motives tied to the various incidents, one cannot draw strong conclusions. At best, we can state that extremist activity appears to be a real but limited factor. The in-depth psychoanalysis or surveying of bombers might shed light on this subject. One can, however speculate that extremists are not likely to hide their "public" motives; i.e., extremists tend to proclaim their bombings in the name of the "people," god, country, etc. They are not likely to bomb without claiming credit for the bombing. Thus, one might speculate that a relatively minor number of the incidents listed as motive "undetermined" would fall within the extremist category. Therefore, the role played by the motives of fun and profit might be considerably stronger than revealed in Table 12.

TYPE OF BOMB

Region by Motive

Table 3 indicates that the motivation behind the various bombings is usually unknown, regardless of the region in which the bombings occurred. If we exclude "unknown" or "other" from our motive category, we note that extremist activity always ranked first or tied for first (twice) as the most likely motivational factor in all nine regions. Again, because of the limited number of incidents for which we have information on motive, we prefer not to speculate further at this time.

It is interesting to note that explosives were selected more frequently than any other type of bomb regardless of region. Incendiaries were the second most popular type of bomb, followed by flammable liquids, hoax devices and booby-trap bombs. Perhaps this ranking indicates the pervasive homogeneity of the culture of bombings; i.e., the availability of information on the use of these bombing devices and the availability of the materials utilized in

these various types of bombs. The only region where the incendiary did not rank second was the Middle Atlantic, where the hoax type ranked second and incendiary ranked third. It is interesting to note that booby-traps and explosive/incendiary devices were not frequently used in any of the regions. This finding might suggest a lack of technical sophistication on the part of our would-be bombers.

This extremism appears to be the primary known motive for bombings regardless of region (if we exclude the rather nebulous category "other").

Killings and/or Injuries and Property Damage by Motive

Table 13 reveals that twenty-eight bombing incidents resulted in a killing. It also indicates that the motive was unknown in over 60 per cent of those incidents (i.e., 17 incidents). When the motive was known, the single motive category containing the largest number of incidents was "other" with four incidents or 45.5 per cent of the total; followed by "extremist" with four incidents or 36.4 per cent of the total; followed by "fun" and "profit" which tied with one incident for 9.1 per cent of the total respectively. Thus, no single known motive was highly tied to killings, but "extremist" activity appeared to be more highly correlated than any other single motive category (if we exclude "other").

One should also note that killings were highly correlated with the use of explosives; i.e., when a killing resulted from an incident, over 64 per cent of those incidents involved explosives. Another four incidents, or 14.3 per cent of the incidents involving killings involved booby-trap bombs. Of significance here is the fact that a relatively minor number of people died in incidents involving booby-traps. Thus, one can assume that bombers did not utilize high explosives in booby-trap type bombs.

Incendiaries also resulted in deaths in 14.3 per cent of the cases under question. Flammable liquids and combination explosive-flammable devices tended to be non-lethal.

If we exclude "unknown" from our motive category, we are confronted with the interesting finding that bombings for "fun" were more than twice as likely to result in injuries than bombings for any other motive.

This category was followed by extremist bombings and our

Table 13. Killing, Injury, Property Damage by Motive by Type of Bomb

	Who (Motive)					*Type of bomb*						*Total*	
	Extremist	*Profit*	*Fun*	*Other*	*Unknown*	*Explosive*	*Incendiary*	*Hoax*	*Booby Trap*	*Flammable Liquids*	*Explosive/ Incendiary*	*Number*	*Percentage*
Killing[a]	4/14.2	1/3.6	1/ 3.6	5/17.9	17/60.7	18/64.3	4/14.3	0/0	4/14.3	2/7.1	0/0	28	1.7
Injury[a]	8/ 9.8	1/1.2	17/20.7	7/ 8.5	49/59.8	63/76.8	9/11.0	0/0	6/ 7.3	4/4.9	0/0	82	4.8
Property Damage[b]	73/ 8.3	10/1.1	14/ 1.6	65/ 7.4	718/81.6	579/65.8	204/23.2	1/0.1	7/ 0.8	83/9.4	6/0.7	880	51.6

[a] The data does not provide information in regard to killings and injuries for 106 or 6.2 per cent of total incidents.
[b] In 183 or 10.7 per cent of total incidents, damage and/or extent of damage is not given.

catch-all category "other." One should also note that explosives appeared to result in injury about seven times as often as the next most "injurious" bomb type (incendiary).

Again, one is surprised by the relatively non-injurious nature of explosive devices. One can only speculate that they were utilized to create "psychic terror" rather than to kill or maim.

Table 13 also reveals that extremist motives were behind property damage more often than any other known motive; i.e., seventy-three incidents for 8.3 per cent of the incidents which resulted in property damage. The second most frequent motive category associated with property damage was "other," with sixty-five incidents or 7.4 per cent of the incidents resulting in property damage.

"Fun" and "profit" were not motives which were frequently tied to property damage. And, as was mentioned earlier, explosive type bombs were about three times more likely to be associated with property damage than its closest rivals: the incendiary, flammable liquids, booby-traps, and combination explosive-incendiary type bombs, respectively (with respective frequency counts and percentage scores of 579/65.8%, 204/23.2%, 83/9.4%, 7/0.8%, and 6/0.7%).

Thus, the rather nebulous picture of the bomb incident which can be drawn from our data is that if the incident is motivated by extremist tendencies, the incident is not likely to result in casualties or property damage. But, nonetheless, extremist motives are more highly associated with killings and property damage than any other identifiable (single) motive. Similarly, if a killing did result from the bombing, the bomb is likely to have been an explosive. If an injury resulted from the bombing, the bomb incident was more likely to be associated with the "fun" motive than with extremist tendencies or a desire for profit. (The bomb was also likely to have been an explosive.)

EXPLOSIVES BY MOTIVE BY KILLING, INJURY, AND DAMAGE

Because explosives, more than any other device, appeared to be closely associated with killings, injuries, and property damage, we thought it would be beneficial to delve further into the correlates associated with explosives. Table 14 reveals that the motive was unknown in 61 per cent of the incidents which resulted in a death. If a death occurred and the motive was known, the motive was

Table 14. Explosive by Motive by Killing, Injury and Damage

	Who (Motive)					*Total*	
Explosives	*Extremist*	*Profit*	*Fun*	*Other*	*Unknown*	*Number*	*Percentage*
Killing	3/16.6	1/5.6	1/ 5.6	2/11.1	11/61.1	18	64.3
Injury	8/12.7	1/1.6	16/25.4	6/ 9.5	32/50.8	63	76.8
Property	54/ 9.3	8/1.4	14/ 2.4[a]	33/ 5.7	470/81.2	579	65.8

[a] All of the perpetrators of bombings causing property damage and having fun or excitement behind their motivation force utilized explosives.

more likely to have been extremist than fun or profit. Table 14 also revealed that if the incident resulted in an injury, the most likely motive was fun, followed by extremist, other, and profit. If the motive was known and property damage resulted from the incident, the motive was more likely to have been extremist than other, fun, or profit.

In summary, when extremist motives are known to have been behind the use of explosives, the result is often property damage. Death and injury, although associated with extremist motivations, appear not to be strongly correlated with the use of explosive devices.

OBJECT OF ATTACK BY MOTIVE BY TYPE OF BOMB

What are the most frequent objects of attack? What are major motives behind bombings that took place during the year 1975? What are the most common types of bombs used? What are the motives behind bombings of targets most frequently attacked, and what types of bombs were used to attack those targets?

These are some of the questions answered in this section. There are nineteen categories under which the targets of attack were studied, see Table 15. The objects of attack which fell under the category "commercial" were the foremost objects of attack. This category accounted for 281 or 16.5 per cent of total bombing incidents which occurred during the year 1975.

The motives for 181 or 64.4 per cent of bombings against commercial establishments were unknown or unavailable. The motivation behind forty-nine (or 17.4% of bombings against commercial establishments) was monetary; i.e., profit-oriented.

Table 15. Object of Attack by Who by Type of Bomb

Object of Attack	Who (Motive)					Type of Bomb						Total	
	Extremist	Profit	Fun	Other	Unknown	Explosive	Incendiary	Hoax	Booby-Trap	Flammable Liquids	Explosive/Incendiary	Number	Percentage
Commercial	35	49	3	13	181	157	52	52	0	18	2		
	12.5	17.4	1.1	4.6	64.4	55.9	18.5	18.5	0	6.4	0.7	281	16.5
Residential	4	0	0	24	246	105	108	9	0	49	2		
	1.4	0	0	8.8	89.8	38.3	39.4	3.3	0	17.9	1.1	274	16.1
Transportation	5	0	0	10	174	114	30	9	9	25	2		
(Vehicle)	2.6	0	0	5.3	92.1	60.3	15.9	4.8	4.8	13.2	1.0	189	11.1
Unknown	11	0	4	10	145	91	32	29	3	13	2		
	6.5	0	2.4	5.9	85.3	53.5	18.8	17.1	1.8	7.6	1.2	170	10.0
Education	5	1	6	3	115	77	30	10	0	13	0		
Facilities	3.8	0.8	4.6	2.3	88.5	59.2	23.1	14.1	0	10.0	0	130	7.6
Undetermined[a]	4	1	0	0	69	67	5	1	0	1	0		
	5.4	1.4	0	0	93.2	90.5	6.8	1.4	0	1.4	0	74	4.3
Local Government	9	2	1	0	59	43	10	6	1	11	0		
	12.7	2.8	1.4	0	83.1	60.6	14.1	8.4	1.4	15.5	0	71	4.2
Federal Government	15	2	0	1	49	49	9	6	0	3	0		
	22.4	3.0	0	1.5	73.1	73.1	13.4	9.0	0	4.5	0	67	3.9
A Person	5	0	9	10	36	38	6	6	6	4	0		
	8.3	0	15.0	16.7	60.0	63.3	10.0	10.0	10.0	6.7	0	60	3.5
Entertainment	0	0	0	1	9	4	4	1	0	1	0		
	0	0	0	10.0	90.0	40.0	40.0	10.0	0	10.0	0	10	0.6
State Government	3	0	0	1	5	2	2	2	0	2	1		
	33.3	0	0	11.1	55.6	22.2	22.2	22.2	0	22.2	11.1	9	0.5

[a] Bombing device was discovered while investigating non-bomb related crimes.

It is also interesting to note that in 17.1 per cent of the incidents against the category "institution" the motives were profit-oriented. This actually accounts for 49 per cent of incidents against the target category "institution" when motives were known.

In twenty or 40.8 per cent of profit-motivated bombing incidents against "commercial" targets, explosive types of bombs were used. In another twenty-eight or 57.1 per cent of the incidents, hoax devices were used; and in only one incident (2%) was an incendiary type of bomb utilized by the perpetrators. In 57.1 per cent of profit-motivated incidents perpetrated against commercial establishments, there were no apparent casualties or structural damage.

Extremists accounted for thirty-five incidents or 12.5 per cent of the total number of incidents. It can be noted that extremist motivation was behind 35 per cent of the motive discernible incidents which involved commercial establishments.

In twenty-four or 68.6 per cent of incidents involving extremists, explosive type bombs were used. In six or 17.1 per cent of these incidents, extremists used incendiary bombs, while hoax devices were used in four or 11.4 per cent of the incidents.

Motivation behind three or 1.1 per cent of incidents was "fun" or excitement. In two of the incidents motivated by "fun," explosives were used and in one incident, a hoax device was utilized.

As was noted, explosive type bombs were commonly used against commercial establishments. In fact, explosive devices were used in 157 or 55.9 per cent of the incidents which involved commercial establishments, while incendiary and hoax type bombs each accounted for fifty-two or 18.5 per cent of the incidents. Flammable liquids accounted for eighteen (or 6.4%) of the incidents.

The second most frequent objects of attack were grouped under the category "residential;" 274 or 16.1 per cent of all bombing incidents reported during the year 1975, involved residential structures. The motivation for an extremely high percentage of bombings involving residential structures was unknown or unavailable; i.e., motives behind 246 or 89.8 per cent of incidents were unknown or unavailable. If the motive was known, the motive was likely to have been listed as "other." Extremist motives were associated with only four incidents (1.4% of the residential bombings). Profit or fun was never identified as the motive.

Incendiaries were associated with 108 or 39.4 per cent of the residential bombings, while explosives were associated with 105 or 38.3 per cent of the residential bombings. Hoax devices accounted for fifty-two or 18.5 per cent and flammable liquids accounted for eighteen or 6.4 per cent of these incidents.

There are numerous reasons for the high percentage of incidents in the motive "unknown" category. One of these reasons is that very few bombers are ever apprehended. (One should note that most bombings appear to involve individuals rather than groups, and that it is infinitely easier for one person to keep a secret than it is for two or more persons.)

Vehicles were the third most common target; i.e., 189 or 11.1 per cent of total bombing incidents during the year 1975 involved vehicles. Information is unknown or unavailable about the motive behind a high percentage of these incidents; i.e., the motive is unknown or unavailable for 174 or 92.1 per cent of the bombings which involved vehicles. Extremists were involved in only five or 2.6 per cent of the transportation incidents, four of which involved the use of explosives. The most common type of bombs used against vehicles were incendiaries, flammable liquids, hoaxes, booby traps, and combination explosive-incendiary bombs.

Education facilities were the fifth most popular objects of attack; 130 or 7.6 per cent of total incidents during the year involved education facilities. (The fourth most common category was listed as object "unknown." This would seem to indicate that the target of attack was destroyed beyond recognition.) Motives behind 115 or 88.5 per cent of incidents in this category were unknown or unavailable. The most common motives associated with this type of bombing were "excitement" (fun), "extremist," and "profit." The most commonly utilized bomb type was the explosive. This was followed by bombs which used incendiaries, "hoax-devices" and flammable liquids.

Local, state and federal government facilities were also popular objects of attack. Seventy-one or 4.2 per cent of total bombing incidents were against local government targets. The motives behind fifty-nine or 83.1 per cent of these incidents were unknown or unavailable. Extremists accounted for nine or 75 per cent of the incidents for which the motive was discerned. Explosives were the most common type of bomb utilized against targets associated with the local government. Explosives were followed by flammable liquids, incendiary, hoax, and booby-trap bombs. There were nine attacks on state government facilities. The motives and types of bombs used followed the general trends which applied to other objects of attack (cited under local government facilities).

Federal government facilities were targets for sixty-seven or 3.9 per cent of bombing incidents during the year 1975. Motives behind forty-nine or 73.1 per cent of these bombings were

unknown or unavailable. Among incidents for which the motive was discerned, fifteen or 83.3 per cent of the bombings involved extremists. Types of bombs employed followed the same general trends as other objects of attack (cited under local government facilities).

The number of bombing incidents against individual persons during the year 1975 was sixty or 3.5 per cent of total incidents. Motivation behind thirty-six or 60 per cent of incidents was unknown or unavailable. Hoax devices were used in nine or 37.5 per cent of incidents with discerned motives. Extremists were known to have been involved in five or 20.8 per cent of the bombings against individuals. The motives behind ten or 41.7 per cent of motive-detected bombings were listed as other than extremist, profit, or fun-oriented. The types of bombs employed by perpetrators against individual persons followed the same trends applied to other targets.

Entertainment was listed as the tenth most common object of attack. The motive was known in only one of these incidents; i.e., "other." Explosives or incendiaries were both used in four incidents, respectively.

In summary, the motives behind most incidents remained unknown, although explosives appeared to be the most common device used against all object categories with the exception of the state government. As was mentioned earlier, the authors cannot offer additional insight as to the preferential use of explosives rather than inflammables or incendiaries (other than to speculate that the explosives apparently are readily available and perhaps more concealable than inflammables or incendiaries).

WHO/DEVICE/POPULATION

The largest number of bombing incidents during the year 1975 (in the United States) took place in cities with populations of under 25,000. This might, in part, be accounted for by the considerable number of urban centers which fall within this population category. Nonetheless, one probably does not think of bombings as a small town phenomenon. One should note that ninety incidents or 23.9 per cent of the bombing devices utilized in cities of this size were listed as undetermined.

Extremists accounted for eighteen incidents or 32.7 per cent of the motive identifiable bombing incidents in cities with populations under 25,000; see Tables 16 and 17. Improvised explosive devices

Table 16. Most Frequently Used Device by Population

Town/City Population	Most frequently used bombing devices						Total incidents	
	IED[a]	Fire Bomb	Pipe Bomb	Molotov Cocktail	Dynamite	Undetermined[b]	Number	Percentage
Under 25,000	76/20.2	28/ 7.4	57/15.2	31/ 8.2	26/ 6.9	90/23.9	376	22.0
25,001- 25,000	21/29.6	6/ 8.5	13/18.3	5/ 7.0	3/ 4.2	16/22.5	71	4.2
30,001- 30,000	6/ 7.6	12/15.4	11/14.1	11/14.1	5/ 6.4	19/24.4	78	4.6
40,001- 50,000	13/22.1	5/ 8.5	8/13.6	2/ 3.4	3/ 5.1	18/30.5	59	3.5
50,001- 60,000	8/19.6	4/ 9.8	6/14.6	5/12.2	3/ 7.3	9/22.0	42	2.4
60,001- 70,000	6/18.7	1/ 3.1	7/25.0	0/0	1/ 3.1	10/21.3	32	1.9
70,001- 80,000	16/18.6	13/15.1	15/17.4	7/ 8.1	5/ 5.8	16/18.6	86	5.0
80,001- 100,000	8/14.5	8/14.5	7/12.7	8/14.5	2/ 3.6	11/20.0	55	3.2
100,001- 250,000	31/18.4	27/16.1	18/10.7	21/12.5	12/ 7.1	45/26.8	168	9.8
250,001- 500,000	44/18.6	31/13.1	23/ 9.7	34/14.3	15/ 6.3	46/19.8	237	13.9
500,001-1,000,000	52/18.9	49/17.8	32/11.6	25/ 9.1	9/ 3.3	69/25.1	275	16.1
Over 1,000,000	31/16.7	18/ 9.7	32/17.3	18/ 9.7	13/ 7.0	43/23.2	185	10.8
Location Unidentified	7/15.9	7/15.9	7/15.9	0/0	6/13.6	12/27.3	44	2.6
Total	319/18.7	209/12.2	237/13.9	167/ 9.8	103/ 6.0	405/23.7	1707	100.0

[a] Improvised Explosive Device.
[b] We cannot determine the types of device from the available data.

Table 17. Motive by Type of Bomb by Population

Town/City Population	Who (Motive)					Type of Bomb						Total	
	Extremist	Profit	Fun	Other	Unknown	Explosive	Incendiary	Hoax	Booby-Trap	Flammable Liquids	Explosive Incendiary	Number	Percentage
	18	11	6	20	321	258	47	32	4	34	1		
Under 25,000	4.8	2.9	1.6	5.3	85.4	68.6	12.5	8.5	1.1	9.0	0.3	376	22.0
	4	1	2	3	61	43	10	9	2	5	2		
25,000- 25,000	5.6	1.4	2.8	4.2	85.9	60.0	14.1	12.7	2.8	7.0	2.8	71	4.2
	6	1	3	1	67	41	24	1	1	11	0		
30,001- 40,000	7.7	1.3	3.8	1.3	85.9	52.6	30.8	1.3	1.3	14.1	0	78	4.6
	3	4	1	1	50	38	11	7	1	2	0		
40,001- 50,000	5.1	6.8	1.7	1.7	84.7	64.4	18.6	11.9	1.7	3.4	0	59	3.5
	0	4	0	4	33	24	8	4	0	5	0		
50,001- 60,000	0	9.8	0	9.8	80.5	58.5	19.5	9.8	0	12.2	0	41	2.4
	2	1	0	3	26	25	4	2	0	0	1		
60,001- 70,000	6.3	3.1	0	9.4	81.3	78.1	12.5	6.3	0	0	3.1	32	1.9
	3	1	2	6	74	50	24	4	1	7	0		
70,001- 80,000	2.5	1.2	2.3	7.0	86.0	58.1	27.9	4.7	1.2	8.1	0	86	5.0
	3	0	1	3	48	29	10	4	3	8	1		
80,001- 100,000	5.5	0	1.8	5.5	87.3	52.7	18.2	7.3	5.5	14.5	1.8	55	3.2
	10	2	2	9	145	88	40	13	5	29	2		
100,001- 250,000	6.0	1.2	1.2	5.4	86.3	52.4	23.8	7.7	3.0	11.9	1.2	168	9.8
	20	9	6	17	185	122	54	24	0	34	3		
250,001- 500,000	8.4	2.5	2.5	7.2	78.1	51.5	22.8	10.1	0	14.3	1.3	237	13.9
	26	10	7	18	214	146	69	31	2	25	2		
500,001-1,000,000	9.5	2.5	2.5	6.5	77.8	53.1	25.1	11.3	0.7	9.1	0.7	275	16.1
	20	11	4	11	139	118	32	23	3	17	3		
Over 1,000,000	10.8	2.2	2.2	5.9	75.1	63.8	17.3	6.5	1.6	9.2	1.6	185	10.8
Location	6	2	2	2	32	31	11	2	0	0	0		
Unidentified	13.6	4.5	4.5	4.5	72.7	70.5	25.0	4.5	0	0	0	44	2.6
	121	57	36	98	1395	1013	344	145	22	168	15		
Total	7.1	2.1	2.1	5.8	81.7	59.3	20.2	8.5	1.3	9.8	0.9	1707	100.0

were used in nine incidents or 81.9 per cent of the incidents which involved extremists. Excitement and fun were the motives behind six incidents or 10.9 per cent of the motive discernible incidents.

The second most frequent number of incidents occurred in cities with populations between 500,001 and 1,000,000. Cities in this size range accounted for 275 incidents or 16.1 per cent of our total. Explosive bombs followed by incendiary bombs were the most frequent types of bombs utilized in these incidents. Nonetheless, undetermined was listed as the most frequent device used in attacks against targets in cities of this population size; i.e., 25.1 per cent of the total.

The third highest number of incidents occurred in cities with populations between 250,001 and 500,000; i.e., 237 or 13.9 per cent of bombing incidents took place in cities classified within this category. We were unable to determine forty-six or 19.8 per cent of the devices used in incidents within this category. Extremists accounted for twenty or 38.5 per cent of motive-discernible incidents which took place within cities of this size. Profit was the motivation behind nine or 17.3 per cent of incidents whose motivations were known. Six or 66.7 per cent of incidents motivated by profit involved some sort of improvised explosive device. Six incidents or 11.5 per cent of the motive identifiable incidents were motivated by fun. Five or 83.3 per cent of the incidents motivated by fun made use of an improvised explosive device.

Cities in the over 1,000,000 population category ranked fourth (as a population category). This category accounted for 185 or 10.8 per cent of our total. Pipe bombs and IEDs were the most frequently identifiable bombing devices used in these cities, accounting for 17.3 and 16.7 per cent of our total, respectively. Fire bombs and Molotov cocktails tied for third place with 9.7 per cent of our total.

Cities of the 100,001-250,000 population category ranked fifth in number of bombing incidents with 168 or 9.8 per cent of our total. The IED, fire bomb, Molotov cocktail, pipe bomb and dynamite ranked first through fifth as the devices utilized in attacks on targets within the identified population category.

In brief, 405 incidents or 23.7 per cent of the bombings in our "population specific" cities were listed as undetermined. The IED and pipe bomb (both crude explosive devices) ranked first and second in frequency of use; i.e., 18.7 and 13.9 per cent of the total incidents. Next came the fire bomb and Molotov cocktail with 12.2 and 9.8 per cent of our total. Dynamite was the least frequently utilized identifiable bombing device.

I can only speculate as to why bombings occurred more frequently in towns of a specific population range rather than another. Future research might establish an association between specific rural economies, such as mining, timber, or farming economies and the occurrence of bombings. Perhaps research might discover a tie between labor-management conflicts, political radicalism associated with university towns and cities and bombings. In brief, the answer may lie in the unique socio-cultural variables tied to the social dynamics of the growth, maintenance or decline process in cities of a given population range. These dynamics may range from the increased possibility of anonymity and anomie in a city to the acquisition of skills in the handling of explosives on the farm or in the mine.

SUMMARY AND CONCLUSION

In brief, bombings during 1975 manifested several characteristics. If the bombing device could be determined, then crude non-military explosive devices with "little inherent" knockdown or killing power were commonly utilized. Nonetheless, explosive devices appeared to be more closely associated with injuries than were devices which used incendiaries or flammable liquids. "Psychic terror" rather than killings or maimings was the most common result of the bombings.

The Pacific, East North Central and South Atlantic regions experienced considerably more bombing incidents than their regional counterparts, while the New England, West North Central and East South Central regions experienced the fewest incidents. However, bomb rate data (number of incidents per 100,000 population) reveals that the Pacific and South Atlantic regions experienced below average bomb rates, while the Mountain, New England, Middle Atlantic, and East North Central regions experienced above average bomb rates.

Although explosive devices, as a whole, were used more frequently than flammable or incendiary devices, either the fire bomb or Molotov cocktail ranked first or second in regard to the most commonly utilized device in all but three of the ten states which experienced the most incidents. Micro-geographic analysis of targets revealed the noncentrality of focus on governmental objects. In fact, commercial enterprises were the foremost objects of attack.

The most highly urbanized and industrialized states were also the states with the most bombing incidents.

The motive was unknown in approximately 78 per cent of the bombing incidents. However, when the motive was determined, extremist motives accounted for almost 50 per cent of the known motives.

If we exclude "unknown" from our motive category, we note that extremist activity ranked first or tied for first (twice) as the most likely motivational factor in seven of our nine regions. In the East North Central and West North Central "profit" or other ranked as the most basic single motive.

No single motive was highly related to killings, but "extremist" activity appears to be more highly correlated than any other single motive category.

Killings were highly related to the use of explosives. Explosives appeared to be more closely associated with killings, injuries and property damage than flammable liquids.

The largest number of bombing incidents during the year 1975 (in the United States) took place in cities with populations of under 25,000.

In conclusion, one should note that illegal bombings appeared to be a real but relatively minor reality during the year 1975. Nonetheless, we concur with the National Institute of Law Enforcement and Criminal Justice findings which contended that,

> . . . the historical association of bombs with revolutions has led many people to associate the increased bombing frequency with the breakdown of society. And thus, for this reason, as well as for the intrinsic terroristic nature of bombings, their impact on the public consciousness has greatly surpassed their level of physical destruction and loss of life [1, p. 55].

It is hoped that this study might help place terrorism by the bomb in a proper perspective, thus dispelling certain myths associated with terrorist bombings which occurred not only in 1975, but also in our current period. It is also hoped that the data and analysis presented here might be utilized in a study of bombing incidents which have occurred since 1975, thus enabling us to more accurately determine changes in the dynamics of terrorist bombings.

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