



## Conseil de sécurité

Distr.  
GÉNÉRALE

S/1997/829  
29 octobre 1997  
FRANÇAIS  
ORIGINAL : ARABE

---

LETTRE DATÉE DU 29 OCTOBRE 1997, ADRESSÉE AU PRÉSIDENT DU CONSEIL  
DE SÉCURITÉ PAR LE REPRÉSENTANT PERMANENT DE L'IRAQ AUPRÈS DE  
L'ORGANISATION DES NATIONS UNIES

D'ordre de mon gouvernement, j'ai l'honneur de vous faire tenir ci-joint le  
texte que le Vice-Premier Ministre de l'Iraq, M. Tarik Aziz, vous adresse au  
sujet des Américains et des personnes qui appliquent la politique des États-Unis  
à la Commission spéciale.

Je vous serais obligé de bien vouloir faire distribuer le texte de la  
présente lettre et de son annexe comme document du Conseil de sécurité.

Veillez agréer, Monsieur le Président, les assurances de ma très haute  
considération.

L'Ambassadeur,

Représentant permanent

(Signé) Nizar HAMDOON



ANNEXE

Lettre datée du 29 octobre 1997, adressée au Président  
du Conseil de sécurité par M. Tarik Aziz, Vice-Premier  
Ministre de l'Iraq

Monsieur le Président,

La résolution 1134 (1997) du Conseil de sécurité et la façon dont les États-Unis ont procédé pour la faire adopter, ce qui a amené trois membres permanents du Conseil, à savoir la Fédération de Russie, la Chine et la France, et deux autres pays, l'Égypte et le Kenya, à s'abstenir lors du vote, font apparaître d'une manière patente la situation arbitraire que les États-Unis imposent par divers moyens, notamment en pratiquant le chantage et en faisant pression sur l'Iraq.

En plus de six ans et demi, la Commission spéciale a détruit en Iraq toutes les armes interdites, des dizaines d'usines et des milliers de pièces d'équipement, qui, d'après elle, seraient utilisées pour fabriquer des armes. Elle a également détruit bon nombre d'usines, de pièces d'équipements et d'appareils à usage civil, en application de résolutions arbitraires, privant l'Iraq de ces ressources alors qu'il est soumis à un embargo total depuis sept ans. Elle a en outre effectué des milliers d'inspections ordinaires et autres. Bien qu'elle ait recours depuis 1994 à un système de surveillance totale très stricte portant sur tout ce qui concerne – ou ne concerne pas – les armements, la Commission spéciale continue de tergiverser et n'a toujours pas présenté au Conseil de sécurité le rapport factuel, objectif et juste qui permettrait d'appliquer le paragraphe 22 de la résolution 687 (1991), sujet que j'ai abordé longuement dans la lettre datée du 12 octobre 1997 (S/1997/789) que je vous ai adressée.

Cette situation s'explique principalement par la position des États-Unis et le rôle que jouent les Américains et les personnes qui appliquent la politique des États-Unis à la Commission spéciale.

Les États-Unis déclarent avec arrogance qu'ils sont résolus à changer le régime en Iraq et à maintenir le blocus auquel le pays est soumis, indépendamment de l'application des résolutions du Conseil de sécurité. Les personnes susmentionnées, qui sont très nombreuses et influentes du fait qu'elles occupent des postes de rang élevé au sein de la Commission spéciale, appliquent cette politique. La Commission est donc devenue un organe influencé dans une large mesure par la politique hostile des États-Unis, dont les objectifs sont illégaux et illégitimes. Au vu de sa composition, de ses activités et de son mandat, la Commission spéciale n'est plus un organe neutre appliquant d'une manière impartiale et objective les dispositions des résolutions 687 (1991) et 715 (1991) du Conseil de sécurité, comme devrait le faire tout organe international responsable.

L'Iraq souffre des nombreuses pratiques arbitraires et abusives auxquelles se livrent délibérément les inspecteurs et les experts américains ainsi que les personnes travaillant pour la Commission spéciale qui appliquent la politique des États-Unis. Le comportement de ces individus, en particulier pendant les

/...

inspections, constitue de toute évidence une menace pour la sécurité nationale de l'Iraq et celle des organes de commandement, compte tenu de la politique ouvertement hostile des États-Unis et des menaces que ces derniers font peser continuellement sur l'Iraq et qu'ils mettent parfois à exécution en recourant à l'agression militaire. J'ai abordé ces questions en détail dans la dernière lettre, en date du 12 octobre 1997, que je vous ai adressée, ainsi que dans ma lettre du 15 juin 1997 (S/1997/456).

Si la situation n'évolue pas, autrement dit si l'on maintient indéfiniment l'embargo imposé à l'Iraq conformément au souhait de parties ayant des objectifs tendancieux, cela signifierait que tout un peuple est pris en otage par des personnes travaillant pour la Commission spéciale mais appliquant en fait la politique hostile, illégale et illégitime des États-Unis. Or, c'est là l'objectif des auteurs de la résolution 1134 (1997) du Conseil de sécurité. Il suffit qu'un des inspecteurs provoque une crise pour que les États-Unis se remettent à exercer des pressions et à pratiquer le chantage au Conseil de sécurité pour faire adopter de nouvelles résolutions, comme ils l'ont fait pour la résolution 1134 (1997) ainsi que pour d'autres résolutions adoptées précédemment.

Pour ces raisons, je tiens à vous informer que le Gouvernement iraquien a décidé qu'il est prêt à poursuivre la coopération avec la Commission spéciale en vue de parvenir à trouver avec elle un arrangement équilibré lui permettant de s'acquitter pleinement de sa mission conformément au cadre juridique et sans excès, à condition qu'aucune personne de nationalité américaine ne participe à une activité quelconque de la Commission spéciale en Iraq, en particulier à des activités d'inspection, des interviews, des activités de surveillance terrestres et aériennes. Nous commencerons à appliquer notre décision de ne pas traiter avec des Américains travaillant pour la Commission spéciale dans le cadre des activités susmentionnées le 30 octobre 1997 à 1 heure. Nous demandons aussi par la présente que toutes ces personnes quittent le territoire iraquien dans les sept jours qui suivent la date susmentionnée.

Je vous ai expliqué dans ma lettre du 12 octobre 1997 concernant la question de l'avion U-2 utilisé par la Commission spéciale qu'il s'agit d'un avion espion américain qui espionne la sécurité et les dirigeants de l'Iraq sous le couvert des opérations de la Commission spéciale, en vue de réaliser les objectifs politiques américains hostiles à l'Iraq. Cela permet aussi de fournir délibérément à la Commission spéciale des informations trompeuses visant à créer des problèmes et des crises artificielles, comme cela s'est produit en particulier en juin et septembre 1997. Nous demandons à la Commission spéciale de retirer la couverture qu'elle offre à cet appareil espion qui survole l'Iraq et nous sommes prêts à trouver avec la Commission une formule neutre à laquelle participeront les membres permanents du Conseil de sécurité, si une telle activité s'avère nécessaire.

Dans la lettre que je vous ai adressée le 12 octobre 1997, j'ai fait des propositions tendant notamment à remplacer l'appareil U-2 par un avion iraquien qui serait mis entièrement à la disposition de la Commission spéciale ou d'utiliser un appareil d'un État neutre qui ne vise pas à atteindre des objectifs personnels contre l'Iraq.

/...

L'Iraq espère aussi que les représentants de tous les autres États Membres permanents du Conseil de sécurité assumeront leurs responsabilités de façon équilibrée au siège de la Commission spéciale à New York et à Bagdad, qu'ils prendront part de façon équilibrée et efficace à toutes les tâches de la Commission, et qu'ils tireront les conclusions techniques ayant trait aux dossiers relatifs aux armes.

Ces dernières années, la Commission spéciale a, sous l'influence des États-Unis et des membres américains à l'intérieur de la Commission spéciale, propagé une longue série de mensonges concernant ce qu'elle a qualifié de processus de dissimulation. Dans la dernière lettre que je vous ai adressée, le 12 octobre 1997, je me suis référé à cette question et j'ai apporté des précisions sur les mensonges que révèlent les travaux de la Commission spéciale eux-mêmes, par exemple en ce qui concerne la question des missiles.

En vue de clore définitivement ce dossier, en sus de ce qui précède, je propose ce qui suit :

1. L'Iraq est prêt à recevoir une ou plusieurs commissions spécialisées des États membres du Conseil de sécurité (à l'exception des États-Unis) et de tout autre État membre du Conseil de sécurité, à titre individuel ou collectif, dans le cadre de la Commission spéciale ou à l'extérieur de celui-ci, en vue de vérifier de façon décisive et définitive les allégations faisant état de dissimulation et de s'assurer que l'Iraq ne détient absolument pas d'armes prohibées.
2. L'Iraq est prêt à assurer la visite par la ou les commissions mentionnées au paragraphe ci-dessus des sites qu'elles souhaitent visiter en vue de vérifier le point en question. Nous sommes prêts aussi à répondre à toutes leurs questions et demandes d'éclaircissements de façon à garantir des moyens de vérification précis dans le cadre du respect de la souveraineté et de la sûreté de l'Iraq et de la dignité de son peuple.

L'Iraq est certain de ne pas posséder d'armes prohibées et il n'a rien à redouter d'une vérification en la matière par tous les moyens concrets, y compris la visite des sites dont la visite est nécessaire pour que les États et les individus qui ne visent pas à atteindre des objectifs hostiles à l'Iraq et à la sécurité nationale de ce pays puissent s'assurer qu'il n'existe pas d'armes interdites sur ces sites.

J'espère que les membres équitables du Conseil de sécurité comprennent la décision que nous avons prise concernant les Américains qui travaillent au sein de la Commission spéciale, ainsi que les autres propositions que nous avons formulées dans la présente lettre. Je tiens à souligner notre désir sincère de continuer à coopérer avec la Commission spéciale en vue de nous acquitter de nos obligations. Parallèlement, nous demandons instamment au Conseil de sécurité d'assumer les obligations qui sont les siennes à l'égard de l'Iraq en respectant la souveraineté, l'intégrité territoriale, la sécurité et la dignité de l'Iraq et en s'engageant rapidement à prendre la décision équitable d'appliquer le paragraphe 22 de la résolution 687 (1991) du Conseil de sécurité, qui montrerait de façon indispensable que l'approche du Conseil de sécurité est en harmonie avec la Charte des Nations Unies à l'égard d'un peuple libre soumis à

/...

l'injustice, à l'oppression et aux excès et en réponse aux autres résolutions du Conseil de sécurité qui revêtent une grande importance politique et que l'Iraq a appliquées et qu'il s'est engagé à respecter.

Veillez trouver ci-joint une liste complète des usines, équipement et appareils qui ont été détruits depuis 1991 afin que le Conseil puisse avoir une vision claire de la question. Je vous fais tenir aussi la liste des noms et numéros des Américains qui ont participé aux travaux de la Commission spéciale afin que les membres du Conseil de sécurité se rendent compte qu'ils représentent un pourcentage très élevé des membres de diverses nationalités qui travaillent pour la Commission.

Veillez agréer, Monsieur le Président, les assurances de ma très haute considération.

Le Vice-Premier Ministre

(Signé) Tarik AZIZ

Bagdad, le 29 octobre 1997

/...

## APPENDIX

### A. THE CHEMICAL PROGRAMME

#### Contents:

1. Table-1: The Destruction by the Iraqi Side of Items Related to the Chemical Programme in 1991.
2. Table-2: The Destruction of Items Related to the Chemical Programme by Air Raids during the War in 1991.
3. Table-3: The Destruction of Items Related to the Chemical Programme under the Supervision of the UNSCOM in 1991
4. Table-4: The Destruction of Items Related to the Chemical Programme under the Supervision of the UNSCOM 1992-1994
5. Table-5: The Destruction of Items Related to the Chemical Programme under the Supervision of the UNSCOM from 1 Sept. - 7 Oct. 1997

**TABLE - 1**

**The Destruction by the Iraqi Side of Items Related to the Chemical Programme in 1991**

Ser. no.	Item Description	Qty.	Notes
1	122 mm rocket type sakar-30	6000	* Empty
2	122 mm rocket type firoS S25	16500	* Empty
3	122 mm warheads	4500	* Empty
4	Aerial bomb type LD250	2000	* Empty
5	Aerial bomb R-400	530	* Filled with alcohol
6	Al-Hussain warhead	20	* Filled with Alcohol
7	Aerial bombs type 250	125	*
8	Coline	55 tons	*
9	P <sub>2</sub> S <sub>5</sub>	170 tons	*
10	MPS	1625 kg	*
11	DFP	2 tons	*
12	Pyrophosphate	3 tons	*
13	Spoilt VX	3170 kg	*

\* All the items were verified by UNSCOM-35

**TABLE - 2**  
**The Destruction of Items Related to the Chemical Programme by Air Raids during the War in 1991**

Ser no.	Item Description	Qty.	Notes
1	Filling station warehouse	7	
2	Production building	6	
3	R & D building	5	
4	Bunkers	4	
5	Mechanical workshop	4	
6	Aerial bomb , workshop	1	
7	Al-Muhammadiat warehouse	35	
8	Library builing	1	
9	Administrative building	2	
10	<u>Falluja/1 site</u> warehouse multipurpose building utilities	4 1 2	
11	<u>Falluja/2 site</u> chlorine plant thionyl plant warehouse multipurpose building	1 1 4 1	
12	<u>Falluja/3 site</u> warehouse multipurpose building utilities	4 1 1	
13	Chemical precursors	1006 ton	
14	<u>Production equipment</u> -Reactors -Distillation Column -Vessel -Scrubber -Compressor -Chiller -Vacumme pump -Heat exchanger -Heating system -Glass Column -Neutralization unit Total	14 19 25 8 8 11 9 2 1 3 2 102	



15	<u>Munitions</u>		
	-120 mm mortar shell filled with CS	20000	
	-120 mm mortar shell empty	24000	
	-82 mm mortar shell filled with CS	107	
	-122 mm rocket empty	29622	
	-122 mm rocket conventional	16050	
	-RPG-7 filled with CS	1400	
	-122 mm rocket filled with nerve agent	2500	
	Total	94179	

**TABLE - 3**  
**The Destruction of Items Related to the Chemical**  
**Programme under the Supervision of the UNSCOM in 1991**

Ser no.	Item Description	Qty.	Notes
1.	R-400 Aerial bomb	56	UNSCOM -12 CW4
2.	122 mm Rocket warhead	7253	DITTO
3.	Aerial Bomb LD-250	2439	DITTO
4.	Aerial bomb 750 kg	8	DITTO
5.	Aerial bomb DB-2	27	DITTO
6.	155 mm Artillery shell	1688	DITTO
7.	Aerial bomb LD-500	327	DITTO
8.	Aerial bomb Qaqa 500 kg	4	DITTO
9.	Tail fin, body, noze cone parts 500 kg bomb	403	DITTO

**TABLE - 4**  
**The Destruction of Items Related to the Chemical**  
**Programme under the Supervision of the UNSCOM 1992-1994**

Ser no.	Item Description	Qty.	Notes
1.	122 mm Rocket components (including warheads motors, and propellant)	36063	UNSCOM -38 [ CDG ]
2.	155 mm Artillery shell filled with mustard	12800	DITTO
3.	155 mm Artillery shell empty	50	DITTO
4.	Al-Hussein warhead filled with GB/GF	16	DITTO
5.	Al-Hussein warhead filled with alcohol	14	DITTO
6.	R-400 aerial bomb	337	DITTO
7.	R-400 Tail fin	804	DITTO
8.	Aerial bomb LD-250 empty	5200	DITTO
9.	Aerial bomb LD-250 filled with mustard	1233	DITTO
10.	Aerial bomb LD-500 filled with mustard	980	DITTO
11.	Aerial bomb type DB-2 empty	1115	DITTO
12.	Aerial bomb type DB-0 empty	61	DITTO
13.	Mustard agent	465154 litter	DITTO
14.	Nerve agent	88360 litter	DITTO
15.	Chemicals precursors	2800000 litter	DITTO
16.	Machines for production of aerial bomb -Plate sheats machine -Roll bending machine -Longitudinal submerged arc welding machine -Horizontal hydraulic press with an expanding mandrel	 1 1 3 1	UNSCOM - 39

	and segment		
	-Oxy-flame cutting machine	2	
	-Robot welding machine	4	
	-Circular submerged arc welding machine	2	
	-Circular submerged arc welding machine with two welding heads	2	
	-Welding positioner machine	2	
	-Spot welding machine	3	
	-Circular shears machine	1	
	-Rotary transfer machine for drilling and tapping	2	
	-Small welding positioner clamped on vertical column	1	
	-3-units of universal production lathe machine	3	
	-CNC turning machine	2	
	-Metal band sawing machine	2	
	-Ring former machine	1	
	-Column drill	2	
	-Horizontal hydraulic press with an expanding mandrel and segment	2	
	-Spinning lathe forming machine	2	
	-3-units of tig welding machine	3	
	-Welding positioner device	1	
	-2-unit of longitudinal tig-welding machine	2	
	-Hydraulic press capacity 10 tons	1	
	-3-unit of universal column drill	3	
	-Induction brazing solder welding machine	1	
	-Profile roll bending machine	1	
	-Metal circular sawing machine	2	
	-Universal rotator table	1	
	-Manual roll banding machine	1	
	-Manual ring former	54	
	Total		

17.	Tools & Molds for item	16	DITTO
18.	Production equipment	52	UNSCOM-38

**TABLE - 5**

**The Destruction of Items Related to the Chemical  
Programme under the Supervision of the UNSCOM  
from 1 Sept. - 7 Oct. 1997**

Ser no.	Item Description	Qty.	Notes
1.	chemical precursors	270 ton	UNSCOM -12 CW4
2.	production equipment which include reactors, columns, heat exchangers, tanks condensers and vessels. All are of different size and capacity.	185	
3.	glass equipment which include reactors condensers, distillation columns and vessels. All are of different size and capacity.	197	
4.	different analytical instruments.	90	

## B. THE BIOLOGICAL PROGRAMME

### Contents:

1. Table - 1 : The Destruction of Items Related to the Biological Programme by the Iraqi side in 1991
2. Table - 2 : The destruction of Items Related to the Biological Programme Under the Supervision of UNSCOM in 1996

**TABLE - 1**

**The Destruction of Items Related to the Biological Programme by the Iraqi side in 1991.**

Ser. no.	Item Description	Qty.	Notes
1	Aerial bomb (R-400)	157	Filled with agents A,B,C (verified by UNSCOM teams) - UNSCOM 126 Oct 1995 - UNSCOM 157 Sep. 1996 - UNSCOM 173 Feb. 1997 - UNSCOM 187 May 1997
2	Al-Hussain warhead	25	Filled with agents A,B,C (verified by UNSCOM teams) - BG-2 Aug. 1995 - UNSCOM 125 Aug 1995 - UNSCOM 126 Oct 1995 - UNSCOM 167 Dec 1996
3	Mobile tanks	46	Empty tanks. (verified by UNSCOM teams) - BG-2 Aug. 1995 - BG-3 Nov 1995
4	Biological agents.	12.8 m <sup>3</sup>	7.5 m <sup>3</sup> agent (A) 3.4 m <sup>3</sup> agent (B) 0.6 m <sup>3</sup> agent (C) 0.3 m <sup>3</sup> agent (G)
5	Culture media	unco- unted	Different types of culture media (verified by UNSCOM teams) - BG-2 Aug 1995 - UNSCOM 125 Aug. 1995
6	Glass wear	unco- unted	Different types of glass wear (verified by UNSCOM teams) - BG-2 Aug 1995 - UNSCOM 125 Aug. 1995
7	Bacterial isolates	unco- unted	Different types of bacterial isolates (verified by UNSCOM teams) - BG-2 Aug 1995 - UNSCOM 125 Aug 1995
8	Empty Munition		Different types of empty munition. ALD 500 (2), 110250 (3), 122 mm (1), 155 mm (1), R400 (6+7 tails). verified by UNSCOM teams - BG-3 Dec. 1995 - UNSCOM 127 Dec. 1996



**TABLE-2**  
**The Destruction of Items Related to the Biological**  
**Programme Under the Supervision of UNSCOM in June 1996**

**Al- Hakam Site**

Ser. no.	Item Description	Qty.	Notes
1.	Spectrophotometer	3	The destruction was carried out under the supervision of UNSCOM 134 from 18/5/1996 to 19/6/1996 and the destruction process was evaluated by UNSCOM 151 from 11/6/1996 to 13/6/1996
2.	Oven	4	
3.	Microscope	3	
4.	Incubator	4	
5.	Phase - contra wilozyt Microscope	1	
6.	Perstatic Pump	2	
7.	PH-meter	3	
8.	Stirrer	1	
9.	Balance	3	
10.	Shaker Orbital	2	
11.	Centrifuge	5	
12.	Spray dryer	3	
13.	St. St. tank (400 L)	2	
14.	St. St. tank (100 L)	1	
15.	Storage tank (200L)	1	
16.	Harvest tank (600L)	1	
17.	Harvest tank (100L)	1	
18.	Fermenter (450L) with accessories.	1	
19.	Fermenter (100L)	1	
20.	Fermenter (150L)	2	
21.	Tank (520 L)	1	
22.	Autoclave	4	
23.	Steam generator.	6	
24.	Chiller	6	
25.	Heavy duty pump	1	
26.	St. St. Tank(5 m <sup>3</sup> )	4	
27.	Fermenter (1850 L)	2	
28.	Fermenter (340 L)	1	

29.	Mixer (780 L)	2	
30.	Air dryer	3	
31.	Air compressor	5	
32.	Water distiller	1	
33.	water Pump	11	
34.	Panel control	2	
35.	St. St. tank for distilled water (5000 L)	1	
36.	Deionized water unit with accessory.	2	
37.	St. St. tank for steam generator	1	
38.	Cooling tower	4	
39.	Drum Dryer	1	
40.	Cold room	3	
41.	Gas oil tank mobile	1	
42.	Gas oil tank - static	2	
43.	Gas oil pump	2	
44.	Fiber glass tank	1	
45.	Water bath	1	
46.	Vibro fix	2	
47.	Bacteriological cabinet	1	
48.	Soil dryer	1	
49.	Sea sealing machine	2	
50.	Harvesting tank (600L)	1	
51.	Collecting tank (500L)	1	
52.	Continuous centrifuge	6	
53.	St. St. tank (400L)	2	
54.	Milling machine	1	
55.	Benterite mixer	1	
56.	Anaerobic incubator	5	
57.	Anaerobic cabinet	1	
58.	Chiller	2	
59.	Centrifuge	1	
60.	Oven	7	
61.	Microscope	3	
62.	Air sampler	5	
63.	Vibrofix	4	
64.	Water bath	5	
65.	Fraction collector	1	
66.	Peristaltic pump	2	

67.	Colory counter	3	
68.	UV detector	1	
69.	PH probe	1	
70.	Water pump	1	
71.	Loop sterilizer	3	
72.	Sonicator	1	
73.	PH meter	2	
74.	Incubator	8	
75.	Lyophilizer	5	
76.	Vacuum pump	4	
77.	Balance	7	
78.	Autoclave	4	
79.	Shaker incubator	6	
80.	Spectro photometer	2	
81.	Lab. Fermenter with accessories	3	
82.	Centrifuge	2	
83.	Contininuous centrifuge	3	
84.	Motor	4	
85.	Water distiller	2	
86.	Sealing maehine	2	
87.	Deep freezer	2	
88.	Laminair flow	1	
89.	Refrigerator	12	
90.	Freezer	3	
91.	Spare parts for different equipment at all sites.		
92.	Flour filling machine	1	
93.	Desicator	1	
94.	Glass ware	uncounted	
95.	Egg incubator	2	
96.	Kjeldhal apparatus	1	
97.	Magnifier	1	
98.	Developer	1	
99.	Cooling bath	1	
100.	Slide projeetor	1	
101.	Test tube shaker	1	
102.	Flrt shaker	1	
103.	Cooling plate	1	
104.	Flask air dryer	1	
105.	Pasteurization unit	1	

106.	Carbon steel tank	1	
107.	Carbon steel tank (100L)	1	
108.	Vibrator	1	
109.	Rotatring pump	1	
110.	Tank (65L)	2	
111.	Tank (166L)	1	
112.	Autoclave	1	
113.	Tank (400L)	2	
114.	Double jackated tank (400L)	1	
115.	Double jackated tank (300L)	1	
116.	Mobile tank (100L) with stirrer	1	
117.	Collecting tank	1	
118.	Incinerator	1	
119.	Cooling tower	2	
120.	pump	22	
121.	Dryer	1	
122.	Incubator	1	
123.	Filter	7	
124.	St. St. tank (different size )	21	
125.	Pressur gauges	28	
126.	Split unit	14	
127.	Chiller	1	
128.	Spare parts	---	
129.	Continous centrifuge	1	
130.	Base unit for fermenter	3	
131.	Glove box	1	
132.	Water distiller	1	
133.	Steam generator	1	
134.	Fermenter (1500L) with accessories	1	
135.	St. St. tank (1500L)	1	
136.	Fermenter (300L)	1	
137.	St. St. tank (20L)	3	
138.	Fermenter (4500L)	2	
139.	St. St. tank (200L)	6	
140.	St. St. tank (2500L)	5	
141.	St. St. tank (?500 L)	1	
142.	St. St. tank (1000 L)	1	
143.	Centrifuge	1	
144.	Spray dryer	1	

145.	Control bord for fermenter (300L)	1	
146.	Control bord for fermenter (4500L)	2	
147.	Control bord for PH + PO2	3	
148.	Control bord for Tanks (2500L)	1	
149.	Control bord for spray dryer	1	
150.	Tank (50L) with mixer St. St.	1	
151.	Control bord for centrifuge	1	
152.	St. St. tank (400L)	1	
153.	St. St. tank (500L)	1	
154.	St. St. tank (1500L)	1	
155.	St. St. tank (2200L)	2	
156.	St. St. tank 10 m3	1	
157.	Fermenter (75L)	1	
158.	Control bord for fermenter (75L)	1	
159.	Tank (600L)	1	
160.	fermenter (300L)	1	
161.	Control bord for fermenter (300L)	1	
162.	Tank (520L)	1	
163.	Centrifuge	1	
164.	Spray drayer	1	
165.	Autoclave	1	
166.	Oven	1	
167.	Steam generator	3	
168.	St. ST. tank 50 m <sup>3</sup>	1	
169.	Fuel tanks	uncounted	
170.	PVC & st.st. pipes with different fittings	uncounted	
171.	Electrical stations equipment	uncounted	
172.	Diesel generators	16	
173.	Sanitary & Constructions materials	uncounted	
174.	Electrical & mechanical tools	uncounted	
175.	Lab. furnitures	uncounted	
176.	Cartoons & plastic boxes	uncounted	
177.	Air Conditioning units	uncounted	
178.	Raw materials for	uncounted	

	biopesticide and SCP production		
179.	Different types & quantities of culture media & chemicals	uncounted	
180.	Thousands of scientific books & periodicals	uncounted	
181.	Administrative & Financials documents	uncounted	
182.	Bacterial isolates used in biopesticide, fertilizer, SCP and organic solvents production	uncounted	
183.	Shed A1	1	
184.	Shed A2	1	
185.	Desel generator Building	1	
186.	Store building	1	
187.	Administration building	1	
188.	Evaluation building	1	
189.	Incinerator building	1	
190.	Research & Development building	1	
191.	Vehicles, maintenance & petroleum station building	1	
192.	Water station building	1	
193.	Electricity building	1	
194.	50 m3 building for SCP production	1	
195.	Main stores building	1	
196.	Drum dryer building	1	
197.	Alcohol stores	1	
198.	5 m3 building for pesticide production	1	
199.	Sanitary and construction material stores	1	
200.	Electrical materials stores	1	
201.	Automobile Parking Area	1	
202.	Coravans for stores and Financial administration	1	

**Notes:-**

- A very large number of the destroyed equipment and materials was not used in the past program or imported for the program purposes, and it is worth mentioning that some of those items arrived at Al-Hakam site after 1993, i.e. 5 cubic meters system for organic pesticides production and the 50 cubic meters system for SCP production. In addition, all spare parts and production raw materials related to the said systems were also destroyed. Moreover, Al-Hakam site buildings were totally destroyed including that which was established after 1992.
- All Al-Hakam site buildings were totally destroyed using high explosives and even the remained buildings structure were collected and re-destroyed by explosives.
- All equipment, instruments and tools were destroyed by cutting, exploding or passing a Bulldozer over them, and after destruction the items were collected in a large pit and covered with a thick layer of cement.
- All scientific books and periodicals were collected in a large pit and burnt.
- All culture media and chemicals were destroyed by water and then buried.

#### Al-Salman Site

Ser. no.	Item Description	Qty.	Notes
1.	Oven	3	The destruction was carried out under the supervision of UNSCOM 134 from 18/5/1996 to 19/6/1996 and the destruction process was evaluated by UNSCOM 151 from 11/6/1996 to 13/6/1996.
2.	Oven with UV	3	
3.	Sterilization room	1	
4.	Cages for animals	69	
5.	Plastic bottles	264	
6.	Plastic gauges	8	
7.	Cover	27	
8.	Part of phase contrast microscope	1	
9.	Benah type centrifuge	2	
10.	Surface tension measuring equipment	2	
11.	Atomic absorption	1	
12.	Water bath	1	
13.	Centrifuge	2	
14.	Lyophilizer accessories	3	
15.	Deep freezer		
16.	Voltage (regulator)		
17.	Base unit for fermenter	1	

18.	Air filter	2	
19.	Parts of lab. equipment		

### AL-Fudaylia Site

Ser. no.	Item Description	Qty.	Notes
1.	Enviromental chamber	4	The destruction was conducted under the supervision of UNSCOM 134 for the period from 18/5/1996 to 19/6/1996 and the destruction process was evaluated by UNSCOM 151 for the period from 11/6/1996 to 13/6/1996 .
2.	Fume hood	1	
3.	Incubation oven	1	

### FMD Site

Ser. no.	Item Description	Qty.	Notes
1.	Fermenter (2600 L)	1	The destruction was carried out under the supervision of UNSCOM 134 from 18/5/1996 to 19/6/1996 and the destruction process was evaluated by UNSCOM 151 from 11/6/1996 to 13/6/1996 .
2.	Fermenter (1425 L)	1	
3.	Fermenter (2100 L)	2	
4.	Fermenter (2950 L)	2	
5.	Central cu	8	
6.	Double Jacketeal tank	1	
7.	Fermenter (141 L)	1	
8.	Centrifuge	1	
9.	Incubater	1	
10.	Water bath	1	
11.	Microscope	1	
12.	Refrigeratar	1	
13.	Freezer	1	
14.	Stirring motor	5	
15.	Autoclave	1	
16.	Mobile tank (125 L)	1	
17.	Mobile tank (2550 L)	1	



**Notes:-**

180 ventilation pipes of FMD site were closed by covering them with a layer of cement.

## C. THE NUCLEAR PROGRAMME

### Contents:

1. Table - 1 : The Destruction of Items Related to the Nuclear Programme by the Iraqi side up to the end of June 1991.
2. Table -2: The Destruction of Items Related to the Nuclear Programme By Air Raids in 1991.
3. Table -3: The destruction of Items Related to the Nuclear Programme during the War.
4. Table -4: The Destruction of Items Related to the Nuclear Programme Under the Supervision of IAEA in 1992.

**TABLE-1**  
**The Destruction of Items Related to the Nuclear**  
**Programme by the Iraqi side up to the end of June 1991**

(Al-Tarmiya site)

Ser. no.	Item Description	Qty.	Notes *
1	Double pole & double coil	12	R 1200, 600 separator and system componens (phase 1 and 2)
2	End pole	6	
3	Vertical return iron supporting the end pole	4	
4	Vacuum chambers	31	
5	Quadruple collectors	8	
6	Quadruple ion sources	7	
7	Double pole supporting carriages	27	
8	Vertical return iron	6	
9	Double pole with no coil	15	
10	Coils	30	
11	Sources	6	
12	Collectors	4	
13	Power supplies for ion sources	36	cabinet containing : - PS1 (10 v, 500 A) - PS3 (400 v, 7 A)
14	Pilot plant recovery of uranium from liners and graphite collectors R-1200	1 6 2	- washing chamber - Leaching tank - Ultrasonic bath

(Al-Tuwaittha site)

Ser no.	Item Description	Qty.	Notes
1	Equipment for project 101	32	different components
2	Equipment for project 105	20	Ditto
3	Equipment for project 106	2	Ditto
4	Equipment for project 102/103	4	Ditto
5	R-100 separators (R-100/1, R100/2 , R100/3)	1	4 different components

6	R-50 Separators	1	3 different components
7	Coils for EMIS projects	3	
8	System for measurement of separation factor for diffuser using R12/R114	500	- porous tubes 60 cm long
9	Anodized barriers (600 tube)	600	- Anodized barrier
10	System for preparation of anodized barrier for P301	1	
11	Measurement system for permeability and burst	1	
12	Unit for UF6 perparation by direct fluorination	2	- Boat type metal unit
13	UF6 cylinders ( 5A.2S.1S)	16	
14	Experimental rig for UF6 purification from HF,N2 and R-114	1	UF6 purification
15	Pilot reprocessing plant-LAMA	1	21 different components
16	Unit for production of highly enriched uranium	1	8 different components
17	Experimental units for U-metal purification	1	5 different components
18	Unit for perparation of UF4 by direct reaction with UO2	1	5 different components
19	Plant for production of metallic uranium /UF4 preparation	1	11 different components
20	Unit for production of nuclear grade UO2 purification	1	28 different components

(Dijla Factory)

Ser no.	Item Description	Qty.	Notes *
1	Power supply	6	
2	Power supply for magnet	2	

(Qaqa'a Gen. EST. site)

Ser no.	Item Description	Qty.	Notes *
1	Equipment for vacuum casting (4th stage development)	1	- about 10 molds
2	E.B.W. detonators	100	detonators
3	Mold for pressing of explosives	10	mold
4	Lenses	30	Lens
5	Systems for detonating 4,8,16 detonators	3	

(Rashdiya EDC.)

Ser no.	Item Description	Qty.	Notes *
1	Unit for UF4 preparation by wet method	1	Reactor
2	Anodized alumina barrier tube suitable for UF6	1	Barrier tube
3	Oil centrifuge	1	10 different components
4	Equipment for projects 360,362,363,364 and 365	3	
5	Unit for Uf6 preparation by direct fluorination (50 gm/batch)	1	

(Al-Atheer Site)

Ser no.	Item Description	Qty.	Notes *
1	Equipment for device development program	3	
2	Equipment for device development program	100	PVDF sensors

**\* Note :-**

All these Buildings were verified by the IAEA inspection teams (1-8) which visited Iraq from 14 May - 18 Nov. 1991

**TABLE-2**

**The Destruction of Items Related to the Nuclear Programme By Air Raids in 1991.**

**(Building)**

Ser. no.	Item Description	Qty.	Notes *
1	Iraqi Atomic Energy Commision		Completley destoryed with all their equipment
	-14 July Reactor building	1	
	- Tamuz-2 Rector building	2	
	- Readioactive wast treatment building	1	
	- Hot cell building	1	
	- Radio isotope production building	2	
	- Computer building	1	Partially destroyed with most their equipment
	- Physical building	1	
	- Chemical Radiochmical Lads	1	
	- Lazer building	1	
	- Fuel Fabrication building	2	Completely destroyed with all their equipment
	- Electromagnetic saprators building	3	
	- Admistration building	2	
	- Mechanical work shopes	2	
	- Cooling Towers	2	
2	Tarimya site		
	- Sapartors buildings	3	Completely destoryed with all equipment
	- Chemical washing buildings	1	
	- Medical center	1	Paritially destroyed
	- Collector preparatu building	2	
	- work shopes	1	
	- water purificaton building		
3	Al-Jazira site		
	- Uo2 production building & its utilities	2	Completely desroyed with all its equipment
	- Ucl4 production building & its utilities	2	
	- Work Shopes	2	

4	Al-Qaim - Yellowcake purification unit	1	All the building & lads with their equipment destroyed Completely
5	Al-Atheer - Testing Bunker - Physical building - Restrant - Power station		

**\* Note :-**

**All this Buildings was verified by the IAEA inspection teams (1-3) which  
visited Iraq from 14 May - 19 July 1991**

**TABLE-3**  
**The Destruction of Items Related to the Nuclear**  
**Programme during the War .**

(Tuwaitha site)

Ser. no.	Item Description	Qty.	Notes *
1	control system for projects 104,105 & 106	1	89 Different Components
2	Equipment for project 101	1	- A field scanning system, consisting of 256 Hall-prodes type KSY-10
3	Equipment for project 106	1	22 Different Components
4	Equipment for project 102/103	1	6 Different Components
5	R-100 separators (R100/1, R 100 /2, R100/3)	1	6 Different Components
6	R-50 separators	1	11 Different Components
7	Power supplies	44	
8	The pilot plant for chemical enrichment	1	27 Different Components
9	Equipment for chemical enrichment programme	3	
10	Chemical enrichment program.Ion exchange separation pilot plant of the uranium isotopes	1	
11	Chemical enrichment program.Ion exchange separation production plant project	1	
12	Co2 Lasers (Iraqi made)	1	Co2 Lasers
13	Experimental apparatus	1	6 Different Components
14	Other laser equipment	1	9 Different Components
15	Tubes for molecular beam	1	
16	X-ray device	1	X-ray device
17	System for denotaing 4-detectors	1	Counter (resol. Ins)



(Tuwaitha site)

Ser no.	Item Description	Qty.	Notes *
18	Unit for UF <sub>4</sub> preparation by using R12 as fluorinating agent	1	Pyrex rotary reactor (May 87-Jan. 91)
19	Unit for UF <sub>4</sub> preparation by using R12	1	Boat type pyrex unit
20	Unit for UF <sub>4</sub> preparation by using R12	1	Pyrex rotary reactor dry method
21	Po-210	140 ugm	- Radioactive source
22	Pilot reprocessing plant-LAMA	1	21 Different Components
23	Unit for preparation of polonium 210	1	8 Different Components
24	Pilot plant for production of UCI <sub>4</sub>	1	8 Different Components
25	pilot plant for recovery of uranium from graphite collector of EMIS size R-1000, R-500	1	6 Different Components
26	R&D system for UCI <sub>4</sub> purification by sublimation on a semi continuous bass	1	4 Different Components
27	system for investigation of UCI <sub>4</sub> purification by sublimation on a semi continuous basis	1	4 Different Components
28	Sublimation units for project 224	1	24 Different Components
29	system for preparation of UCI <sub>4</sub> by liquid phase reaction between liquid CCI <sub>4</sub> and UO <sub>3</sub>	1	8 Different Components

(Tuwaitha site)

Ser no.	Item Description	Qty.	Notes *
30	system for purification of UCl <sub>4</sub> by vacuum sublimation	1	16 Different Components
31	system of reduction of uranium peroxide	1	9 Different Components
32	UCl <sub>4</sub> preparation by liquid phase reaction	1	7 Different Components
33	UCl <sub>4</sub> production by liquid phase chlorination	1	8 Different Components
34	UCl <sub>4</sub> productions by vapor phase chlorination (1kg/batch)	1	6 Different Components
35	UCl <sub>4</sub> production system	1	7 Different Components
36	Unit for CCl <sub>4</sub> purification	1	7 Different Components
37	pilot plant for recovery of uranium from liner (EMIS)	1	6 Different Components
38	System for handling washing solution containing uranium recovered from the liner	1	8 Different Components
39	Unit for production of highly enriched uranium	1	2 Different Components
40	Unit for purification of Mg metal powder	1	4 Different Components
41	Experimental studies of U-metal purification	1	6 Different Components
42	Unit for purification of U-metal	1	29 Different Components
43	Unit for preparation of UF <sub>4</sub> by direct reaction with UO <sub>2</sub>	1	2 Different Components
44	Unit for preparation of UF <sub>4</sub> from crude UO <sub>2</sub> directly	1	5 Different Components
45	Unit for preparation of nuclear grade UO <sub>2</sub> purification	1	4 Different Components

(Tuwaitha site)

Ser no.	Item Description	Qty.	Notes *
46	Unit for preparation of nuclear grade UO <sub>2</sub> purification	1	6 Different Components
47	Ceramic line	1	23 Different Components

(Dijla Factory)

Ser no.	Item Description	Qty.	Notes *
1	Power supply	5	

**\* Note :-**

All this equipment was very verified by the IAEA inspection teams (1-8) which visited the Iraq from 14 May - 18 Nov. 1991

**TABLE-4**  
**The Destruction of Items Related to the Nuclear**  
**Programme under the Supervision of IAEA in .1992**

**(Al-Atheer site Building)**

Thirty five thousands square meters were destroyed at Al-Atheer site, approximately as follows :-

Ser. no.	Item Description	Qty.	Notes	Team No.	Date
1	High explosives test vunker	1	Destroyed by filling the room with concrete	11 th IAEA	7-15/4/92
2	Explosion chamber	1	Destroyed bycutting torch	Ditto	Ditto
3	Control building	1	Destroyed by explosives	Ditto	Ditto
4	Physics building	1	Ditto	Ditto	Ditto
5	casting building	1	Ditto	Ditto	Ditto
6	Carbide building	1	Ditto	12 th IAEA	26/5/92 - 5/6/92
7	powder building	1	Ditto	Ditto	Ditto
8	polymer	1	Ditto	Ditto	Ditto

**(Al-Tarmiya site Building )**

1500 square meters of Al-Tarmiya site's building were destroyed as follows:-

Ser no.	Item Description	Qty.	Notes	Team No.	Date
1	Seperators building	1	Destroyed by explosive	12 th IAEA	26/5/92 - 5/6/92
2	Electrical power supply station for Seperators building (No. 80)	1	Destroyed by explosive	13 Th IAEA	14-21/7/92
3	Electrical power station	1	Destroyed by explosive	Ditto	Ditto

(Al-Shirkat site Building )

Ser no.	Item Description	Qty.	Notes	Team No.	Date
1	Electrical power supply	3	Destroyed by explosives	12 th IAEA	26/5/92 - 5/6/92
2	Seperators building	1	Destroyed by explosives	Ditto	Ditto

(Al-Tuwaittha Equipment)

Ser no.	Item Description	Qty.	Notes	Team No.	Date
1	Glove box	15	Totally destroyed by filling with cement	8 th IAEA	11/18/11 1991
2	Manipulator	10	Totally destroyed	Ditto	Ditto
3	Mixer settlers	32	Ditto	Ditto	Ditto
4	Vacuum chambers	30	Ditto	7 th IAEA	11-22/10 1991
5	Vacuum systems	1	Ditto	Ditto	Ditto
6	Vacuum tube	4	Ditto	Ditto	Ditto
7	Elevator tester	2	Ditto	Ditto	Ditto
8	Oil centrifuge assembly	2	Ditto	Ditto	Ditto
9	Oil centrifuge cylinders	3	Ditto	Ditto	Ditto
10	Centrifuge cover	7	Ditto	Ditto	Ditto
11	Uf6 loading system	1	Ditto	Ditto	Ditto
12	Tools boxes for the centrifugal	5	Ditto	Ditto	Ditto
13	equipment belong to the centrifugal	1725	Ditto	Ditto	Ditto
14	Mold for pressing the parts	1	Ditto	Ditto	Ditto

	of vacumm boxes				
15	Elevator for the ecntrfuge welding	1	Ditto	Ditto	Ditto
16	Puls column system	1	Ditto	Ditto	Ditto
17	Marging steel	100tons	Ditto	Ditto	Ditto
18	Varous special aluminum	45tons	Ditto	Ditto	Ditto
19	Magnetic magnesium oxide	240000 pieces	Ditto	Ditto	Ditto
20	Hot cells	5	Ditto	Ditto	Ditto
21	Electrode size 400	6	Ditto	Ditto	Ditto
22	Electrode face	5	Ditto	Ditto	Ditto
23	return Iron size 1000	5	Ditto	Ditto	Ditto
24	Ring return iron	10000 pieces	Ditto	Ditto	Ditto
25	Steel system 106	2	Ditto	Ditto	Ditto
26	Copper coils	15	Ditto	Ditto	Ditto
27	End electrodes	4	Ditto	Ditto	Ditto
28	Vertical return iron	4	Ditto	Ditto	Ditto
29	Different size and kind of equipment for the production of lithium isotopes	20	Ditto	Ditto	Ditto
30	600 mm Vacuum Chambers Die	1	Ditto	Ditto	Ditto
31	600 mm Vacuum Chambers	2	Ditto	Ditto	Ditto
32	600 mm Vacuum Ducts	2	Ditto	Ditto	Ditto

(Equipments Rashdiya Engineering Design Centre)

Ser no.	Item Description	Qty.	Notes	Team No.	Date
1	Carbon fiber sylinders	7	<b>Note:- centrifuge components</b>	7 th IAEA	11-22/10 1991
2	Recipients with holes	4	Ditto	Ditto	Ditto
3	Recipients with holes and pumps	2	Ditto	Ditto	Ditto
4	Recipients without holes	1	Ditto	Ditto	Ditto
5	Recipients of different design and 2 loose pieces	2	Ditto	Ditto	Ditto
6	Top flanges	54	Ditto	Ditto	Ditto

7	Top flange with damper	1	Ditto	Ditto	Ditto
8	Test jigs	2	Ditto	Ditto	Ditto
9	Set of piping with valves and vacuum circuit	1	Ditto components contained in a wooden crate	Ditto	Ditto
10	Al cylinders for rotors-one with end caps	3	Ditto	Ditto	Ditto
11	Maraging steel cylinders (2 full length & 3 shorter ones)	5	Ditto	Ditto	Ditto
12	Molecular pumps	5	Ditto	Ditto	Ditto
13	Carbon fibre cylinders	7	Ditto	Ditto	Ditto
14	Scoop Assy. (1 with manifold)	2	Ditto	Ditto	Ditto
15	Tube (approx. 1cm x 15 cm)	8	Ditto	Ditto	Ditto
16	Inner magnet holder	28	Ditto	Ditto	Ditto
17	Ring (approx. 1 cm OD)	107	Ditto	Ditto	Ditto
18	Tube (approx. 1cm x 45cm) (scoop part)	19	<b>Note:- centrifuge components</b>	Ditto	Ditto
19	Tube (approx. 1cm x 30cm) (scoop part)	18	Ditto	Ditto	Ditto
20	Sensor holder	36	Ditto	Ditto	Ditto
21	Lower bearing spacer	10	Ditto	Ditto	Ditto
22	Upper damper spacer	6	Ditto	Ditto	Ditto
23	Upper damper (3 cm dia. x 6cm)	8	Ditto	Ditto	Ditto
24	Flange-spacer ring)	4	Ditto	Ditto	Ditto
25	Small sensor holder	6	Ditto	Ditto	Ditto
26	Scoop Assy. part (2cm OD x 4cm)	17	Ditto	Ditto	Ditto
27	Scoop Assy. part-tube (15cm Dia x 7cm)	27	Ditto	Ditto	Ditto
28	U-cup Upper damper part	5	Ditto	Ditto	Ditto
29	K-F flange upper manifold part	6	Ditto	Ditto	Ditto
30	Magnet outer holder ring (1.5 Dia x 6.5)	13	Ditto	Ditto	Ditto
31	Washer (0.5 cm Dia x 4.5cm)	29	Ditto	Ditto	Ditto
32	Washer (0.4cm Dia x 3cm)	31	Ditto	Ditto	Ditto
33	Scoop ring (3 Dia x 2 cm)	9	Ditto	Ditto	Ditto
34	Lower bearing housing cover (5 cm Dia x 1.5 cm)	3	Ditto	Ditto	Ditto

35	Ring (8 cm Dia x 1cm)	1	Ditto	Ditto	Ditto
36	Lower damper spacer	2	Ditto	Ditto	Ditto
37	Ring (2 cm Dia x 1cm)	4	Ditto	Ditto	Ditto
38	Rocker arm	20	Ditto	Ditto	Ditto
39	Pin for assembling (Lower Assy.) (0.3 cm Dia x 4 cm)	18	Ditto	Ditto	Ditto
40	Spacer (0.6 cm x 0.2 cm)	55	Ditto	Ditto	Ditto
41	Tubes for scoop Assy. Al (1 cm Dia x 84 )	10	Ditto	Ditto	Ditto
42	Tubes for scoop Assy. Al (1 cm Dia x 74 cm )	20	Ditto	Ditto	Ditto
43	Tubes for scoop Assy. Al (1.5 cm Dia x 35 cm)	23	Ditto	Ditto	Ditto
44	Tubes for scoop Assy. Al (1.4 cm Dia x 50 cm )	5	Ditto	Ditto	Ditto
45	Rings (10.5 cm OD x 1 cm) Motor coil	5	Ditto	Ditto	Ditto
46	Cu scoop material (straight) (0.4-0.6 x cm) (tapered)	20	<b>Note:- centrifuge components</b>	Ditto	Ditto
47	Motor stator spacer (approx. 1.3 cm x 1.3 cm)	80	Ditto	Ditto	Ditto
48	Tube (tails pipe for scoop assy.) (2.2 Dia x 20)	22	Ditto	Ditto	Ditto
49	Maraging steel rotor top cap	38	Ditto	Ditto	Ditto
50	Carbon Machine top baffle	7	Ditto	Ditto	Ditto
51	2Carbon machine top cap	10	Ditto	Ditto	Ditto
52	Carbon machine bottom cap	1	Ditto	Ditto	Ditto
53	Aluminium top rotating magnet holder (small)	13	Ditto	Ditto	Ditto
54	Aluminium bottom damper skin	76	Ditto	Ditto	Ditto
55	Aluminium top rotating magnet holder (large)	6	Ditto	Ditto	Ditto
56	Bottom damper housing	25	Ditto	Ditto	Ditto
57	Spacer flange	16	Ditto	Ditto	Ditto
58	Top damper housing	9	Ditto	Ditto	Ditto
59	Bottom damper cover	14	Ditto	Ditto	Ditto
60	Adjusting screw	21	Ditto	Ditto	Ditto
61	parts of scoop assembly	19	Ditto	Ditto	Ditto
62	Pivot holder (brass)	18	Ditto	Ditto	Ditto
63	Maraging steel top rotating magnet holder	41	Ditto	Ditto	Ditto



64	Feed shroud	66	Ditto	Ditto	Ditto
65	Feed input flange	47	Ditto	Ditto	Ditto
66	Bottom bearing flange	22	Ditto	Ditto	Ditto
67	Feed port	24	Ditto	Ditto	Ditto
68	Top scoop holder	27	Ditto	Ditto	Ditto
69	AINCo magnet holder	43	Ditto	Ditto	Ditto
70	Part of top scoop	54	Ditto	Ditto	Ditto
71	Bottom scoop boss	24	Ditto	Ditto	Ditto
72	Washer	18	Ditto	Ditto	Ditto
73	Top damper adjusting screw	60	Ditto	Ditto	Ditto
74	Part of lower damper	30	Ditto	Ditto	Ditto
75	AINCo magnets	84	Ditto	Ditto	Ditto
76	Co Sm magnets	49	Ditto	Ditto	Ditto
77	Gas manifold	82	Ditto	Ditto	Ditto
78	Transport shield for protection	1	Ditto	Ditto	Ditto
79	Aluminium bottom flange	16	<b>Note:- centrifuge components</b>	Ditto	Ditto

(Al-Tarmiya Equipments)

Ser no.	Item Description	Qty.	Notes	Team No.	Date
1	Special filters	169	Totally destroyed	7 th IAEA	11-22/10 1991
2	Electro magnetic enrichment disk containing (9) double rods and coils	1	Ditto	Ditto	Ditto
3	High frequency transformery	3	Ditto	Ditto	Ditto
4	Furnaces and collectors for electromagnetic rod	10	Ditto	Ditto	Ditto
5	Double rods without coils	18	Ditto	Ditto	Ditto
6	Cupper coils with (6) carriers	15	Ditto	Ditto	Ditto
7	1200 mm Vacuum Chambers Die	1	<b>Note:- EMIS related items were destroyed by cutting out pieces from each with a plasma torch</b>	Ditto	Ditto

8	1200 mm Vacuum Chambers	5	Ditto	Ditto	Ditto
9	106 mm system Chambers	1	Ditto	Ditto	Ditto
10	Small Experimental Chambers	2	Ditto	Ditto	Ditto
11	1200 mm Vacuum Ducts	2	Ditto	Ditto	Ditto
12	Misc 1200 and 600 mm Vacuum Chamber Cones	19	Ditto	Ditto	Ditto

(Al-Atheer Equipments)

Ser no.	Item Description	Qty.	Notes	Team No.	Date
1	Large cold isostatic press	1	Totally destroyed	12 th IAEA	26/5/92 - 5/6/92
2	Large hot isostatic press and 2 associated	1	Ditto	Ditto	Ditto
3	Cold isostatic press	1	Ditto	Ditto	Ditto
4	Hot isostatic press	1	Ditto	Ditto	Ditto
5	Resistance furnace	2	Ditto	Ditto	Ditto
6	Induction furnace	1	Ditto	Ditto	Ditto
7	Vacuum furnace	2	Ditto	Ditto	Ditto
8	Vacuum plasma spray system	1	Ditto	Ditto	Ditto
9	Atomospheric spray system	1	Ditto	Ditto	Ditto
10	Precision turning machine	3	Ditto	Ditto	Ditto
11	Super precision lathe machine	1	Ditto	Ditto	Ditto
12	3-axis coordinate measuring machine	1	Ditto	Ditto	Ditto
13	Jig Grinding machine	1	Ditto	Ditto	Ditto
14	Viewing windows for high explosives	3	Ditto	Ditto	Ditto
15	High speed camera	1	Ditto	Ditto	Ditto

(ST. EST. FOR HEAVY ENGINEERING EQUIPMENT / DAURA)

Ser no.	Item Description	Qty.	Notes	Team No.	Date
1	Dyes Vacuum chamber for EIMS programe	1	Completely destroyed by 8th IAEA team	7 th IAEA	11-22/10 1992
2	Dyes pressing	1	Ditto	Ditto	Ditto
3	Vacuum Chambers	1	Ditto	Ditto	Ditto
4	Equipment for cylinder belong to the flow forming mach.	1	Ditto	8 th IAEA	11-18/11 1992
5	Flow forming mach. wheels	1	Ditto	Ditto	Ditto
6	Secondary axle for rotory cylinder mach.	1	Ditto	Ditto	Ditto
7	Turning mach. fixer	1	Ditto	Ditto	Ditto
8	Filament for welding mach.	1	Ditto	Ditto	Ditto
9	Vertical balancing mach.	1	Ditto	Ditto	Ditto
10	Horizontal balancing mach.	1	Ditto	Ditto	Ditto
11	Mandril for flow forming mach.	1	Ditto	Ditto	Ditto
12	Power supply electronic cards	1	Ditto	Ditto	Ditto
13	EBW fixer	1	Ditto	Ditto	Ditto
14	Fixer for turning mach.	1	Ditto	Ditto	Ditto

## **D. THE MISSILE PROGRAMME**

### **Contents:**

1. Table -1: The Destruction of Items Related to the Missile Programme by the Iraqi side in summer 1991
2. Table - 2 : The Destruction of Items Related to the Missile Programme by Air Raids during the War 1991.
3. Table - 3 : The Destruction of Items Related to Missile Programme under the Supervision of the UNSCOM since 1991.

**TABLE -1**  
**The Destruction of Items Related to the Missile**  
**Programme by the Iraqi side in Summer 1991**

Ser no.	Item Description	Qty.	Notes
1	Horizontal testing vechicle , model (2B11 M)	2	
2	Independent testing vechicle , model (9B41 M)	2	
3	Horizontal testing vechicle , model	2	
4	The oxidizer refiling vechile , model (9T30)	14	
5	The fuel refuelling vehicle , model (9T29)	4	
6	Missile transporting vehicle , model (2T3)	16	7 of which were destroyed at Al-Mahaweel. 8 were destroyed at Al-Saadia and one at Al-Nibbae and the remnants were transported to Al-Taji project (144) , and the remnants of 9 vehciles had been verified by inspection team UNSCOM (34)
7	Small vechile for missiles transport among stores and work shops , model (2T5)	9	8 of which were destroyed at Al-Nibbae and one at Al-Taji.
8	Iraqi made decoy launcher	5	
9	Iraqi made testing and launching vehicle	4	The remnants had been verified by UNSCOM - 34 inspection team
10	Spare parts of transporting vehicle , model (2W1M)	1	
11	Scud and Al-Hussain missiles	85	The remnants had been transported to project (144) at the request of UNSCOM-31 inspection team and had been verified by UNSCOM -34
12	Training Scud Engine	3	Ditto
13	Sectional scud engine	2	Ditto
14	Nozzles for Scud engine (mock-up)	3	Ditto
15	Gyroscope (10)	107	Ditto

16	Gyroscope (9)	110	Ditto
17	Gyroscope (12)	98	Ditto
18	Scud and Al-Hussain warheads	133	of which (45) warheads were modified for chemical warheads. All warheads were verified by UNSCOM teams 31, 34 and chemical and biological inspections teams.
19	Fuel tank for Al-Hussain Missile	83	
20	Oxidizer tank for Al-Hussain missile	52	
21	Warheads for Al-Hussain missile (empty)	76	
22	Engine cover tail for Al-Hussain missile	50	
23	Fins for Al-Hussain missile	80	
24	Parts manufactured and semimanufactured (imported)	used in ring (200) sets for the item 1,2,3, & 4 above	
25	Parts manufactured locally for the items 1,2,3,4 & 5 above	Ditto	
26	Dyes and tools	approx (100)	
27	Imported parts for arming & safety fuze for Al-Hussain missile	used in ring (200) sets	
28	Torus air bottle (imported)	74	
29	Fuel and oxidizer shut off valves for Al-Hussain missile, and its disassembled parts	250 sets	Verified by UNSCOM -34
30	Primary fuel tanks	70	
31	Steel structure for Al-Waleed Launcher	8 pcs	
32	Cabin equipment for test and firing vehicles	4 pcs	
33	Instruments and electrical	10 set	

	parts for test & firing vechiles		
34	Moulds and fixtures for rubber parts	31	
35	Fixtures and tools for welding	9	
36	Fixtures placed on dollies to transport the BADR/2000 motor	8	
37	Decoy for BADR/2000	1	
38	Turbopump unit (imported)	35	
39	Fuel and oxidizer injectors (imported)	Hundreds of thousands	
40	Flexible pipes (different) types (imported)	Hundreds of each	
41	Turbine wheel (imported)	about 1200	
42	Casting and forging parts (imported)	Hundreds	
43	Shaft of turbopump unit (imported)	Hundreds	
44	Explosive charges with its plugs (imported)	Thousands	
45	Reducer valves (imported)	Hundreds	
46	Standard parts	Thousands	
47	Dyes (imported)	About 20	
48	Hydrazine fuel (imported)	10 ton	
49	Pipes with its connections (local attempts)	50 of each type	
50	Metal rings different sizes (local attempts)	10 of each type	
51	Parts of gas generator (local attempts)	50 of each part	
52	parts of heat exchanger (local attempts)	50 of each part	
53	Inner and outer shells for combustion chamber and nozzles (local attempts)	Tens of rejected samples	Local attempts failed due to the lack of experience in flow forming technology. Many foreign companies refused or were unable to provide such technology.
36	Corrugated rings (local attempts)	Tens of rejected samples	Unsuccessful attempts to get the exact shape because of

			many technical difficulties , deformation and tearing of the sheet metals.
37	Precise parts of valves (local attempts)	Tens of rejected samples	These samples were rejected because they fell short of the requirment of high accuracy.
38	Electrical and mechanical parts used in gyro manufacturing (imported)	Ten thousand	Used in manufacturing about 800 sets. Important parts didn't arrive to Iraq.
39	Invertor (imported)	2	
40	Barometric relay unit (sam-assembled) and individual parts (imported)	Many thousands	Used in manufacturing about 1000 units
41	Ampoule battery (imported)	25	
42	Moulds for plastic metallic parts (imported)	50	
43	Different electrical & electronical parts cables, relays, connectors (imported)	Ten thousand	
44	Gyroscope (imported)	Two sets	They were rejcted because of insufficient experience and some imported parts were not received.
45	Computer (analogue) (local manufacturing attempts)	5	
46	Timer (local manufacturing attempts)	6	
47	Junction box (local manufacturing attempts)	4	
48	Emergency destruction system (local manufacturing attempts)	5	
49	Barometric relay unit (local manufacturing attempts)	5	
50	Harness (local manufacturing attempts)	6	
51	Firing cables (local manufacturing attempts)	8	
52	On board switch	9	
53	Different mechanical parts used for gyro manufacturing	Tens	Rejected because of insufficient experience and



	(local manufacturing attempts) required		the required machines were not completely received.
54	Longitudinal acceleration integrating gyro	20	All prototypes were not completely assembled.
55	Combat launchers type (9n117M)	4	<ul style="list-style-type: none"> <li>- Two chassis in Basmaya</li> <li>- Two chassis , arm rotating base in Al-Mansoriya</li> <li>- Three arms and three rotating bases in Al-Nibbae.</li> </ul> The debris had been seen by UNSCOM -34.
56	Iraqi combat launchers (Al-Nida)	4	The debris had been seen by UNSCOM -34.
57	Training launcher type (9n117M)	1	The launcher was dismantled in order to use some parts in reverse engineering. <ul style="list-style-type: none"> <li>- The arm and the base were destroyed in Al-Nibbae, the chassis and the cabinet were destroyed in Falluja (Al-Haswa) and Basmaya respectively. The debris had been seen by UNSCOM-34.</li> </ul>

**TABLE - 2**  
**The Destruction of Items Related to the Missile Programme by Air Raids during the War 1991.**

Ser no.	Item Description	Qty.	Notes
1.	Different welding machine	22	These equipment and materials, in addition to the buildings of the project, were destroyed by the air raids during the war. Those destroyed items had been verified by the UNSCOM inspection teams.
2.	Electric welding machine	1	
3.	Automatic spot welding machine	1	
4.	Circular welding machine	1	
5.	Auto-circular welding machine	1	
6.	Electrical-arch welding machine	2	
7.	Plasma cutting machine	1	
8.	Bending machine	2	
9.	Vertical drilling machine	2	
10.	Rolling machine	1	
11.	Radial drilling machine	2	
12.	Cutting machine	2	
13.	Alignment test equipment	4	
14.	riveting press 5 ton	1	
15.	Different tools, dies and fixtures	Tens	
16.	Fuel and oxidizer tanks and warheads	Tens	
17.	Plastic and metal parts for fuses	Hundreds	
18.	Different parts for the project activity	Thousands	
19.	Different raw materials	Many tons	
20.	General warehouse for hydraulic materials.	all building & contents	100% Destroyed

21.	Electrical workshop	all building & contents	100% Destroyed
22.	Mechanical workshop	all building & contents	100% Destroyed
23.	Assembly workshop	all building & contents	100% Destroyed
24.	Testing and firing vehicle	1	100% Destroyed
25.	System of supplying primary fuel and compressed air	20	not completely destroyed
26.	Hydraulic pumps	18	not completely destroyed
27.	Testing and electric system	1	100% Destroyed
28.	Universal lathe machine	10	320 - 2500 mm
29.	CNC lathe machine	2	250/270 mm
30.	Universal milling machine	4	400 X 650 mm
31.	CNC milling machine	3	300 X 600 mm
32.	Universal grinding machine	5	150 X 500 mm
33.	Drilling machine	3	
34.	Hydraulic testing stand	1	
35.	Training unit for Hydraulic system	1	
36.	Welding machine	2	
37.	Pipe bending machine	3	
38.	Guillotine shear cutting machine	1	12/3000 mm
39.	Bending machine	2	6/2500 mm
40.	Universal shear cutting machine	1	250/10 mm
41.	ARC welding machine	3	400 Amp.
42.	Vertical drilling machine	2	
43.	Flame cutting machine	1	2000/4000 mm
44.	ARC welding machine	6	400 Amp.
45.	Spot welding machine	1	3 mm
46.	Vertical drilling machine		
47.	D.C. Generator	2	24 Volt.
48.	Ohmmeter	3	
49.	Oscilloscope	3	
50.	Building 141 (BELAT AL-SHUHADA)	1	
51.	Two furnaces in building 141	2	
52.	Thermal insulation equipment in building 141	1	

53.	Balances, measuring equipment and different kinds of tools in building 141	1	
54.	Building 146	1	
55.	Air-conditioning and utility equipment for building 146	5 pcs	
56.	Building 147	1	
57.	Weight and control equipment for building 147	2	
58.	Building 151	1	
59.	Air-Conditioning and utility equipment for building 151	3	
60.	Building 153	1	
61.	Air-conditioning and utility equipment for building 153	5	
62.	A(30)gallons mixer with its accessories in building 153	1	
63.	Building 155	1	
64.	A(300)gallons mixer with its accessories in building 155	1	
65.	Air-conditioning and utility equipment in building 155	4	
66.	Air-conditioning and utility equipment in building 156	1	
67.	Building 162	1	
68.	Air-conditioning and utility equipment in building 162	5	
69.	building 142	1	
70.	building 171	1	
71.	Assembly, measuring and control equipment in building 171	2 pcs	
72.	Air-conditioning and utility equipment in building 171	5	
73.	Building 172	1	
74.	Test, measuring and control equipment in building 172	1	
75.	Air-conditioning and utility equipment in building 172	3	
76.	Building 173	1	
77.	Building 191	1	
78.	Air-conditioning and utility	3	

	equipment in building 191		
79.	Cleaning and drying equipment in building 191	4 pcs	
80.	Building 192	1	
81.	Control equipment and water pump with its accessories in building 192	2	
82.	Store No.115 with a quantity of raw materials	1	
83.	Building 163	1	
84.	Building 164	1	
85.	Building 165	1	
86.	Mechanical workshop, building 61	1	
87.	Restaurant building (11)	1	
88.	Main utility Building which include electrical station, boilers, diesel generators, and water chillers in building (72)	15 pcs	
89.	Electric sub-station, building (73)	1	
90.	Electrical and mechanical external networks	1	
91.	C.N.C. machine	1	
92.	Milling machine	1	
93.	Rolling machine	1	
94.	Radial welding machine	1	
95.	Circular and radial welding fixture	1	
96.	Assembly welding fixture	1	
97.	Radial drilling machine	1	
98.	Band saw	1	
99.	Aging oven	1	
100.	Alignment test stand	1	
101.	Overhead crane	1	
102.	Turning machines	5	
103.	Drying furnaces	2	
104.	Curing furnaces	2	
105.	Three dimensions test machine /DEA	1	
106.	Workshop 311	1	

107.	Workshop 411	1	
108.	Workshop 412	1	
109.	Restaurant	1	
110.	Stores	3	
111.	Building 532	1	
112.	Building 520	1	
113.	Building 562	1	
114.	Building 560	1	
115.	Building 79	1	
116.	Building 510	1	
117.	Building 511	1	
118.	Building 512	1	
119.	Building 513	1	
120.	Building 514	1	
121.	Building 515	1	
122.	Building 525	1	
123.	Thrust calibration instrument in building 532	15	

**TABLE - 3**

**The Destruction of Items Related to Missile  
Programme under the Supervision of the UNSCOM since 1991**

Ser. no.	Item Description	Qty.	Notes
1.	Missiles (Al-Hussain)	48	Destroyed by UNSCOM -3
2.	Training Missiles	4	Ditto
3.	Al-Fahad-300	9	Ditto
4.	Al- Hussain warheads	32	Ditto
5.	vehicle for horizontal test	1	Ditto
6.	Independent test vehicle	1	Ditto
7.	Horizontal training vehicle	1	Ditto
8.	Oxidizer filling vehicle	5	Ditto
9.	Fule filling vehicle	4	Ditto
10.	Test and launching vehicle	4	Ditto
11.	Missile carrying vehicle	8	Ditto
12.	Russian Launcher	6	Ditto
13.	Al- Nida'a Launcher	2	Ditto
14.	Al- Waleed Launcher	2	Ditto
15.	Missile container	132	Ditto
16.	Oxidizer tank (filled)	18	Ditto
17.	Main fuel tank (filled)	7	Ditto
18.	Fule tank for ignition (filled)	6	Ditto
19.	Oxidizer tanks (empty)	187	Destroyed by UNSCOM 3 and 18
20.	A Mobile decoyed launcher	4	Ditto
21.	Decoyed missiles	11	Destroyed by UNSCOM 10
22.	Fixed Launchers (at the Western Zone )	28	Destroyed by UNSCOM 18
23.	Fixed Launchers {(for training)(Al- Taji)}	2	Ditto
24.	Launcher for experiment purposes (Tel-Afer)	1	Ditto
25.	Concrete base and civil engineering work (At the Western Zone):	23	Ditto
26.	Decoyed structure for a fixed launcher at the Western Zone.	2	Ditto
27.	Special aluminium container for the special head of Al-	11	Destroyed by UNSCOM -3

	Hussain Missile.		
28.	Conventional warhead for Al- Hussain Missile (structure only)	2	Destroyed by UNSCOM -3
29.	Oxidizer tank	1	Destroyed by UNSCOM -3
30.	Fuel tank	1	Ditto
31.	Nose of half tank and dishes	Tens	Ditto
32.	Aluminium head 122 mm	12000	Ditto
33.	Incompleted steel head 122mm	4000	Ditto
34.	Dye for dishes	1	Ditto
35.	Air cylinder	12	Ditto
36.	Triple holder with part of a transportation trolley.	3	It was in gable no. (15) and had been verified by the previous inspection team. Though it was partially destroyed, the inspection team UNSCOM-28 directed that it should be destroyed completely.
37.	Fixtures of destroyed tank for the production line .	2	Ditto
38.	Small parts for sub-systems of the tanks (pieces of connected pipes & other terminations)	tens	Ditto
39.	Fixed launcher arm structure	23 pcs.	During the period from 10 to 15 Aug. 1990
40.	Arm holder	21 pcs.	Ditto
41.	The upper joint hinge for the main hydraulic cylinder	156 pcs.	Ditto
42.	The lower joint hinge for the main hydraulic cylinder	37 pcs.	Ditto
43.	fixed launcher stool	12 pcs.	Ditto
44.	Mobile launcher under construction	1 pcs.	Ditto
45.	Rotating and fire adjustment launching stool for the	9 pcs.	Ditto



	missile		
46.	Concrete base for fixed launcher assembling	9 pcs.	(2) of them in Al-Qaqa'a site , (2) in Al-Dorah site and (5) of them in Al-Nahrawan site .
47.	Fixtures of assembling fixed launchers parts.	2 pcs.	Destroyed by UNSCOM -8
48.	primary experimental fixed launchers. Saddam Base.	1 pcs.	Destroyed by UNSCOM -8
49.	Grain core (mandrel) in bldg. 162	2 pcs.	Ditto
50.	Assembling tools for casting (casting top) in bldg. 162	2 pcs.	Ditto
51.	Tools for shaping the end of the motor (displacement plate) in bldg. 162	2 pcs.	Ditto
52.	Tools for fixing the core from the upper side (casting centering) in bldg. 162	2 pcs.	Ditto
53.	Tools for fixing the core from the lower side (casting centering) in bldg. 162	2 pcs.	Ditto
54.	Cover plate in bldg. 162	2 pcs.	Ditto
55.	A mock-up for Bader (2000) missile	1 pc	Ditto
56.	Dollies for Badr (2000).	4 pcs.	Ditto
57.	Mixer 300 gallon .	2 pcs.	Destroyed by UNSCOM (31 and 34)
58.	Bowl with its covers	3 pcs.	Ditto
59.	Control equipment for mixer 300 gallon in building 154	2 units	Ditto
60.	Casting and curing tank in building 162	2 pcs.	Ditto
61.	Tilting mechanism in building 162	2 pcs.	Ditto
62.	Tilting mechanism with cradle in building 192	1 pc	Ditto
63.	Calender in building 141	1 pc	Ditto
64.	Press 300 ton in building 141	1 pc	Ditto
65.	Degreasing unit in building 141	1 pc	Ditto

66.	Sand blasting unit in building 141	1 pc	Ditto
67.	Tank near building 252	2 pcs.	Ditto
68.	Double cone drier in building 145	1 pc	Ditto
69.	Grinder in building 146	2 pcs.	Ditto
70.	Blade sifter in building 146	1 pc	Ditto
71.	Filter in building 146	1 pc	Ditto
72.	Control unit for drying and grinding in building 146	2 units	Destroyed by UNSCOM (31,34)
73.	Building 141		Ditto
74.	Building 148		Ditto
75.	Building 155		Ditto
76.	Building 156		Ditto
77.	Building 162		Ditto
78.	Building 145		Ditto
79.	Building 146		Ditto
80.	Building 147		Ditto
81.	The second welding positioner (the upper part) seal no. 05298	1 pc	Ditto
82.	The second welding positioner (the lower part) seal no. 05299	1 pc	Ditto
83.	The third welding positioner (the first part) seal no. 05300	1 pc	Ditto
84.	The third welding positioner (the second part) seal no. 05302	1 pc	Ditto
85.	The third welding positioner (the third part) seal no. 05303	1 pc	Ditto
86.	third welding positioner (the fourth part) seal no	1 pc	Ditto
87.	Maraging steel	114 pcs.	Ditto
88.	Computer for DEA machine	1 pc	Ditto
89.	Instrone cooling chamber	1 pc	Ditto
90.	Instrone measurement unit	1 pc	Ditto
91.	Coolers	2 pcs.	Ditto
92.	Dollies	2 pcs.	Ditto
93.	Tig longitudinal welder, seal		Ditto

	no. 05290		
94.	Extruder, seal no. 05294	1 pc	Ditto
95.	Cnc turing lathe seal no. 05306 & 05634	2 pcs.	Ditto
96.	Hydraulic press seal no. 05311	1 pc	Ditto
97.	Longitudinal flange and dome welders	3 pcs.	Ditto
98.	Wrapping machine	3 pcs.	Ditto
99.	Calender	1 pcs.	Ditto
100.	X-Ray gun and accessories seal no. 05635		Destroyed by UNSCOM-31.34
101.	Motor case transport dollies	2 pcs.	Ditto
102.	Aging oven	1 pcs.	Ditto
103.	Sand blasting unit	2 units	Ditto
104.	Shearing machine seal no. 05628	1 pc	
105.	Hydraulic press 1600 ton	1 pc	Ditto
106.	X-Ray machine seal no .05637	1 pc	Ditto
107.	X-Ray controller seal no. 05638	1 pc	Ditto
108.	X-Ray development machine seal no. 05639 & 05640	2 pcs.	Ditto
109.	Lathe seal no.05641 & 05642	2 pcs.	Ditto
110.	Hydraustatic test	1 pc	
111.	Measuring bench	1 pc	Ditto
112.	Coolers	2 pcs.	Ditto
113.	Test stand for rocket motors	2 pcs.	Ditto
114.	Electronic equipment for static test	1 unit	Ditto
115.	Cradle for bader (2000)	1 pc	Ditto
116.	Cooling and heating chamber	2 pcs.	
117.	Building 531		Ditto
118.	Building 532		Ditto
119.	Test base no. 2 in Al-Rafah site project 1728	1	Destroyed by UNSCOM-8
120.	Gun(350)mm,complete system in(Hymreen)including the following items:	1	-(5)pipes of(10)m lenght -one breech -(7)slide bearings and all other secondary items such as one projectile left at the

			site. UNSCOM-18 agreed to the manner of destruction and then verified the debris of destruction.
121.	<p>Destruction of the materials stored at the General Establishment for Automobile production as follows:</p> <ul style="list-style-type: none"> <li>-Tubes(350)mm bore dia.and (10)m length</li> <li>-Tubes(1000)mm bore dia.and (5-6)m length</li> <li>-Slide bearings.</li> <li>-Hydraulic recoil cylinders for(1000)mm caliber.</li> <li>-Steel breech for(350)mm caliber.</li> <li>-Brackets for(1000)mm caliber.</li> <li>-Bearing for(350)mm caliber.</li> </ul>	<p>6</p> <p>44</p> <p>15</p> <p>4</p> <p>1</p> <p>4</p> <p>1</p>	The team headed by Mr. Patrace visited the site on 6.12.1991 and agreed to the manner of destruction.
122.	All the remaining charges in Al-Qa'qaa Establishment had been destroyed in the presence of Mr.Douglas Englund and his team.		
123.	The remaining (7)slugs had been destroyed during summer of 1991 by the Iraqi side.		
124.	Tracking radar	1	All systems were destroyed under the supervision of UNSCOM (MG-2)
125.	Balancing machine	1	It was destroyed under the supervision of UNSCOM (MG-4) on 23/7/1995
126.	Vacuum Furnace	2	Destroyed under the supervision of UNSCOM(MG-4) on 23/7/1995
127.	Flow forming machine	2	Destroyed under supervision of UNSCOM(MG-4) on 23/7/1995
128.	Meteo-1 (Supersonic	1	The system was dismantled by

	Parachute system)		MG-8 on 25 and 25 of March 1996. The system was then sent to UNSCOM headquarters in New York .
--	-------------------	--	---

**E. list of Americans holding important positions at the  
Special Commission Headquarters in New York**

- |                    |                           |
|--------------------|---------------------------|
| 1. Duelfer Charles | Deputy Executive Chairman |
| 2. Moor James      | Director of Operation     |

**Missile Team**

- 3. Ritter Scott
- 4. Jarrabee John
- 5. Silver Mark
- 6. McCarthy Tim
- 7. Curits Gentry

**Biological Team**

- 8. Spertzel Richard
- 9. Krikorian Debra
- 10. Semman Diane

**Chemical Team**

- 11. Blades Timothy
- 12. Black Steve

**list of Names of American Experts Worked at  
Baghdad Monitoring and Verification Center  
in Iraq  
During the Period from  
August 1994 to 25 October 1997**

Ser.	NAME
1	A'ARON HERBERT
2	ABRIL FERDINAND
3	ADSHER DONALD
4	ADAMOVICZ JEFF
5	ADAMSON GREGORY
6	ANDERSON ANDREW
7	ANDREWS DAVID
8	AYERS TIM
9	BAFF KEVIN
10	BAGRASSARIAN TACK
11	BALAN TOM
12	BALDWIN STEVE
13	BALES PHILIP
14	BECK CHRISTOPHER
15	BELK VICTOR
16	BELL ALAN
17	BENFORD JASON
18	BOCK COLBY
19	BOSTON RONALD
20	BOUGHNER STEVEN
21	BOWMAN ERIC
22	BOYLE ROBERT
23	BRASI ANTHONY
24	BRUBAKER GERALD
25	BURANS JAMES
26	BURKETT PHILIP
27	BURNETTE JAMES
28	BUTTERFIELD EDWARD
29	BYLAN THOMAS
30	CARPENTER JEREMY
31	CECIL DENNIS
32	CHARTER KATHLEEN
33	CHURILLA ALBERT
34	CILBERT JASON
35	CLEM RICHARD
36	COKER ALEX
37	COLEMAN SYLVESTER
38	COLLINS DOUGLAS
39	COUSSA PAUL
40	CURTIN JAMIE
41	DERR BRETT
42	DISILVERO THOMAS
43	DIETRICH DAVID
44	DISILVERIO TOM
45	DOBBS MICHAEL
46	DOWNTON JONES FELIX
47	DUELFER CHARLES
48	EVANS FRANK
49	FIASCO WILLIAM
50	FIELDS GEORGE



Ser.	NAME
51	FLASCO BILL
52	GALLEGOS CHRISTOPHE
53	GAMILIES DONALD
54	GAMILLES DON
55	GORN DAVID
56	GRIMM DENNIS
57	GROMOLL JENNY
58	GROVE KEN
59	GRUDER STEVE
60	GUY PAMELA
61	GUYTON GREGORY
62	HAGER JENNIFER
63	HAMID RASHID
64	HARDEN TERRY
65	HAYES DAVID
66	HEDRICK KEN
67	HENDERSHOT DANIEL
68	HENDRICK KEN
69	HENSTRIDGE ROBERT
70	HERMENEGILDO ORTIZ
71	HOFSTETTER KENNETH
72	HOLLSTEIN JOHN
73	HOPE SUE
74	HOPE-JEFFERSON M
75	HYLAND JAY
76	HYLAND JOHN JOSEPH
77	INNIS MICHAEL
78	JACKSON ERIC
79	JAIMES JOSEPH
80	JOHAN THOMAS
81	JOHANI TOM
82	JOHNSON PETER
83	JOHNSTON CORY
84	KEARNEY PATRICK
85	KELLY DON
86	KHOZAIM HAMID
87	KINCHELOF WILLIAM
88	KNIGHT ROGER
89	KRAMER KEVIN
90	KRIKORTIAN DEBRA
91	KURTZ PAUL
92	LAMBERT MARK
93	LANAUX RONALD
94	LANGSFORD JOE
95	LAVENDER GRAIG
96	LEIENDECKER ROBERT
97	LINEHAN JOHN
98	LITTLE HENERY
99	LIVINGSTONE LAYNE
100	LONG CARY

Ser.	NAME
101	MARTELLE GUY
102	MCCASLIN LINDA
103	MC GEE GLENN
104	MEJASKI JOSEPH
105	MILLER BRUCE
106	MISKELL RONALD
107	MIURA GEORGE
108	MOJICA THOMAS
109	MOORE JAMES
110	MORPHY WENDELL
111	MOZWIATK JOHN
112	MULLINS JOHN
113	MURPHY WENDELL
114	NELSON WILLIAM
115	NIMMER GEORGE
116	NISBET MATTHEW
117	NOAH DALE
118	NORRIS JAY
119	OBRIEN THOMAS
120	O'CONNELL KEVIN
121	ORTIZ ED
122	ORTIZ HERIBERTO
123	PANTAN FRANK
124	PANNELL LANY
125	PATILIS GREGORY
126	PERKINS THOMAS
127	PHILLIPS JOHN
128	PROTER DAVID
129	PRUSCHKI DAVID
130	RAHAWI MOHAMMED
131	REED ROBERT
132	RELMAN KENNETH
133	RLADES TIMOTHY
134	ROCKWOOD LAURA
135	ROUSE DANNY
136	RUSKE BILL
137	RUSKE WILLIAM
138	SALES PHILIP
139	SANCHEZ VANESSA
140	SANDNESS GEORGE
141	SASSER TOM
142	SCHNABEL RICHARD
143	SCHRYER MIKE
144	SEAMAN DIANE
145	SEARS JAMES
146	SHANKS ROBERT
147	SHIRASAGO DALE
148	SHRIER MICHAEL
149	SLANKAS JOHN
150	SLANKAS TOM

Ser.	NAME
151	SNOW JAMES
152	SPERTZEL RICHARD
153	STALLINGS JOHN
154	STEWART TIM
155	STOCKER JEFFREY
156	STROBBE DARRIN
157	STROTHER KEITH
158	SUN THERESA
159	SWEARENGEN JAMES
160	TAYLOR DAVID
161	TIERNEY WILLIAM
162	TIMPERLEY CHRIS
163	TOZANI THOMAS
164	TREIBL SCOTT
165	VERHEUL LUKE
166	WANDELL SEOU
167	WALLACE TOM
168	WALTON DONALD
169	WEST TERRY
170	WHALEY DAVID
171	WHITAKER GREGG
172	WILDER GARY
173	WILLHIGHT THOMAS
174	WILLIAMS DAVID
175	WOLF JUSTIN
176	ZEISE KEVIN

**F. List of the American Experts who  
Participated in UNSCOM Operations  
(inspections and discussins) in Iraq  
from 15 May 1991 to 25 October 1997**

Ser.	NAME
1	ABDALLAH SHERIF
2	ABRAM DAVID
3	ADAMS JOHN
4	ADAMSON GREGORY
5	AKHADARY ANDREW
6	ALEXANDER DAVID
7	ALEXANDER RIDLEY
8	ALLEN BARRY
9	ALLEN C
10	ANDERSON STEVE
11	ANDRADE G
12	ANDRADE STEPHEN
13	ANDREWS DAVID
14	ANTTONEN JOHN
15	ANZELON GEORGE
16	ARCHELETA M
17	ARMSTRONG STUART
18	AYOUB MIKE
19	BADER ED
20	BAGGSON MAURICO
21	BAILEY LOREN
22	BAILEY RUSSELL
23	BAKHJET S
24	BALDWIN STEVEN
25	BALES PHILIP
26	BANKS ARTHUR
27	BARQUIST RICHARD F
28	BARR JERRY
29	BEATTIE DENNIS
30	BECHLER JOHN
31	BECK VICTOR
32	BECKER DENNIS
33	BEDEAU LAWRENCE
34	BEHME P
35	BELCHER MELVIN
36	BELK VICTOR
37	BENET HELEN
38	BENNETT EARL
39	BENNING MICHAEL
40	BERNABE GILBERT
41	BERNARD STACY
42	BESANCON CHARLES
43	BEZEEUW KURT
44	BIEBER C
45	BLACK STEVEN
46	BLADES TIMOTHY
47	BLEDSE JOHN
48	BOLTZ KENNETH
49	BOLTZ KENTON
50	BONI A. L

Ser.	NAME
51	BOOTH M
52	BOSTICK KENT
53	BOSTON RONALD
54	BOWERMAN DENNIES W
55	BOWMAN ERIC
56	BOYETT GREG
57	BRAKOPP TERRY
58	BREEDON NICHOLAS
59	BRIDGES FRED
60	BROCK THOMAS
61	BROSKUS GERARD
62	DROUGH PAUL
63	BROWN EDWARD
64	BROWN GLENN
65	BROWN JAMES
66	BROWN JOHN
67	BROWN SUSAN
68	BRUBAKER GERALD
69	BRUBAKER GERRY
70	BRUAN JAMES
71	BRYCE PEGGY
72	BUDZINSKI DAVID
73	BULLARD WILLIAM
74	BURANS JAMES
75	BURKS CHARLES
76	BURNEIL CHRIS
77	BURNER BARBARA
78	BURNETT JASON
79	BURNETTE KATHLEEN
80	BURNS ERSKINE
81	BUTTERFIELD EDWARD
82	CALDWELL MICHAEL
83	CALVIN WOOD
84	CAMPBELL ERNEST
85	CAMPBELL RICHARD
86	CANTLIN SHAWN
87	CARPENTER JEREMY
88	CARROLL LANRIE
89	CASE ROBERTDIERKES
90	CASE ROGER
91	CASTEEL MARION
92	CATHEY
93	CENEY JAMES
94	CHAMBERS LARRY
95	CHARTERS KATHLEEN
96	CHAUGHNESSY MICHAEL P
97	CHEAVENS TOMN
98	CHIRTEL JOSEPH
99	CHUNG H
100	CHUNG JOHN

Ser.	NAME
101	CLARK BRIAN
102	CLARK ERIC
103	CLAVIAN JOHN S
104	CLEM RICHARD
105	COGHILL ALAN
106	COLEMAN SYLYESTER
107	COLIN ERNEST WILLIAM
108	COLLIN S.
109	COLLINS DOUGLAS
110	CONAWAY W
111	CONDE FERNANDO
112	CONRATH EDWARD
113	COOPER P
114	CORDNER ROBERT
115	CORNEP GARY
116	CORREY LARRY
117	COTTREL S
118	COUSSA PAUL
119	CRISWELL RAYMOND
120	CROSSFIELD PAUL
121	CRUZ MIGUEL
122	CULP JOHN
123	CURRER PAUL
124	DANIELSON JAY P
125	DARGON JOSEPH
126	DAVID NINOS
127	DAVID SMITH
128	DAVIES BILLY
129	DAVIS JAY
130	DAVIS W
131	DAYTON CLIFF
132	DECOWSKY DOUGLAS
133	DEE
134	DEINHARDT KURT
135	DELUCA MIKE
136	DEMAIORIBUS MICHAEL
137	DEMARINO MICHAEL
138	DENNIS CHARLES
139	DENNIS STEVE
140	DENT STEPHEN
141	DEPREE STEPHEN
142	DERR BRER
143	DIAZ WALTER
144	DIENHARDT KURT
145	DIGNAN TIMOTHY
146	DISILVERIO THOMAS
147	DITILLO JOHN
148	DIXON G
149	DOBBS MICHAEL
150	DOMKE BILL

Ser.	NAME
151	DOMKE WILLIAM
152	DONOHUE DAVID
153	DORN DAVE
154	DOWNING GREG
155	DREW MICHAEL
156	DUELEER C. A
157	DUELFER CHARLES
158	DULLAHAN J
159	DUNES RICHARD
160	DUNTCAN KEN
161	DUPREE STEPHEN
162	DYLAN THOMAS
163	ECKERT WILIAM D
164	ECKHART GLEN
165	EITZEN ED LTC
166	ENGLUND DOUGLAS M
167	ERIEDMAN ABIGAIL
168	EROWN EDWARD
169	ERTEL WAYNE
170	ESSWEIN CHARLES
171	EVANS FRANK
172	EVANS ROBERT
173	EVERHART SYLVESTER
174	EZZELL JHON
175	FAIN DOUGLAS
176	FANCHER RAYMOND
177	FEAR JAMES
178	FIASCO BILL
179	FIASCO WILLIAM
180	FICKLIN BOB
181	FISHER JASON
182	FLAMM KEVIN
183	FLASCO BILL
184	FLICKER STUART
185	FLYNN MICK SEAN
186	FOGELMARK JOHN
187	FOSTER JEFF
188	FRAGA CARLOS
189	FRANKE STEVE
190	FRANZ DAVID
191	FRAZIER JOSEPH
192	GABR WALID
193	GALATI TERENCE
194	GALLAGHER CAROLINE
195	GALLUCCI ROBERT
196	GAMILLES DONALD
197	GANGER JOHN
198	GARNT RANDY
199	GEISBERT BILL
200	GENTRY CURTIS



Ser.	NAME
201	GEOCE DAVID
202	GEOFFREY ST. JOHN
203	GERHART KENNETH
204	GIRDANY MARTHA
205	GLENN SANTOS
206	GLOVER JERRY
207	GOERINGER KABRENA
208	COLDBERG DAVID
209	GOODMAN SHARON
210	GOSCHY PAUL
211	CRANNIS EDWARD
212	CRAIG CHESTER
213	GRANT RANDY
214	GRIFFIN JOHN
215	GROVE CLARK
216	GROVE GORDEN
217	GRUBBS ROGER
218	GRUDER STEVE
219	GUILLERMIN EDWARD
220	GUSH ALAN
221	CUTHRIE LARRY
222	GUYTOON ROBERT
223	GUYTOON B
224	HAFF CHARLES
225	HAGUE ROBERT
226	HAJIB YAH
227	HAKKILA A
228	HAIRSTON HERBERT
229	HARDIN MIKE
230	HARPER BRUCE
231	HARPER CHARLES
232	HARROP WILLIAN
233	HARTMAN M
234	HARVEY THOMAS
235	HATCOCK RALPH
236	HATHAWAY JAMES
237	HAWKINS ANTHONY
238	HAYDU NANIEL
239	MAYES DAVID
240	HAYMANN JOHN
241	HEALEY GEORGE
242	HELSEL JOHN
243	HERNANDEZ IGNACIO
244	HEZELTINE PHILIP
245	HIDLE SVEIN
246	HOFF LARRY
247	HOGAN JACK
248	HOGOBOOM DAVID
249	HOLSTEIN JOHN
250	HOOKER GREGORY

Ser.	NAME
251	HOOPER RICHARD
252	HOWE GARY
253	HOWSMAN STANLEY
254	HUBBARD HARVEY
255	HUBBARD PETER
256	HUMPHREY RALPH
257	HURLEY
258	HUXSOLL DAVID
259	HYLAND JOHN J
260	IKELLY DONALD
261	IRELAND LESLIE
262	IRWIN FRANK
263	ISENBERG DAVID
264	JACKSON ERIC
265	JAMIES JOSEPH
266	JANGEN KAREN
267	JEFFERSON RON
268	JEFFREY BEDELL
269	JEMRSON ALEXANDER
270	JOHANT THOMAS
271	JOHNSON BARBARA
272	JOHNSON MICHEAL
273	JOHNSON SHIRLEY
274	JOHNSON STEVE
275	JOHNSON-WINEGAR A
276	JOHNSTON CHRIS
277	JOLLY ART
278	JONES ANDREW
279	JONES DAVID
280	JONES STEVEN
281	JORGENSEN C
282	JULIAN PHILIPS
283	KADLEC ROBERT
284	KALAL OMAR
285	KARAM PIERRE
286	KAROUSAKIS PANOS
287	KASIMATIS DAVID
288	KAY DAVID
289	KEARNEY PATRICK
290	KEEHAN KEVIN
291	KELLEY BOB
292	KELLEY ROBERT
293	KELLLOGG PAUL
294	KELLY DON
295	KELLY R
296	KEN SANDERS
297	KENNEDY RICHARD
298	KENZIE JOSEPH
299	KENST RON
300	KEVIN ST. LOUIS

Ser.	NAME
301	KING RONALD
302	KINNTISH RONALD A
303	KIRK JAMES
304	KNIBBS TYRONE
305	KOLLO MICHAEL
306	KONSTANTINOV JOHN
307	KOSTER DAN
308	KRAUSE LARRY
309	KRIEGER WESLEY
310	KRIKORIAN DEBRA
311	KUEHN A. J
312	KULEFF BRIAN
313	KURTZ PAUL
314	KWAN DAVID
315	KYLER JEAN
316	KYME WILLIAM
317	LACKEY ALAN
318	LALLEY RICHARD
319	LAMKIN KENNETH
320	LANTZ TIMOTHY
321	LARRABEE JOHN M
322	LEACH WILLIAM
323	LEARY JEFF
324	LEBHERZ WILLIAM
325	LENNOX JACK
326	LEPAK BRIAN
327	LESH DAVID
328	LIDORIUS ERIC
329	LIBURDI S
330	LINDSTROM A. E
331	LIOVINGSTON JAMES
332	LIPPERT JEFFERY
333	LOFTIN JEFF
334	LOGWINUK ALEX
335	LOONG GARY
336	LOVRICH JOSEPH
337	LUCKEY SHAUN
338	LUNKS JAMES
339	LYSOBEY MICHAEL
340	MACCARTHY TIM
341	MACGATTIN S
342	MACLEAN L
343	MACLEOD GREG
344	MAGEE DICK
345	MAGUIRE KELLY
346	MAHAN DAVID
347	MALINOWSKY FRANK
348	MANGALINDAN ALEX
349	MARKS RONALD
350	MARTELLE GUY

Ser.	NAME
351	MARTIN JAMES
352	MARTY J
353	MASCIO WILLIAM
354	MATTHEWS MARTIN
355	MATYSSE JEREMIAH
356	MAXTON ROBERT
357	MCCORD CHRISTOPHER
358	MC FARLANE LINDA
359	MCKNIGHT JAMES
360	MCNEECE JAMES
361	MEJASKI JOSEPH
362	MELOY JOHN
363	MENDOZA ALBERT
364	MEREISH KAY
365	MERRILL C
366	MIDDLETON VANCE
367	MIKULAK R.
368	MINURA GEORGE
369	MISKELL RONALD
370	MITCHESON GRAHAM
371	MITTELMAN GREG K
372	MIZE DAVID
373	MOHR ALAN
374	MOHR JEFF
375	MOODY MICHAEL
376	MOORE JAMES C
377	MORT WILLIAM
378	MOSES RICKY
379	MOSHIER TIM
380	MOSLEY DOUGLAS B
381	MUDRY TIM
382	MUNROE BRAD
383	MURPHY VINCENT
384	MURPHY WENDELL
385	NACK DAVE
386	NAJARIAN PAUL
387	NARD THOMAS
388	NAVARRO LUIS
389	NELSON BILL
390	NELSON KURT
391	NELSON THOMAS P
392	NICHOLS JERI
393	NIMMER GEORGE
394	NISRET MATT
395	NORMAN CALVIN
396	O'CONNELL KEVIN
397	OLCOTT WILLIAM
398	OLIVE BRENT
399	ORLOWSKE DALE
400	ORTIZ HERIBERTO

Ser.	NAME
401	PADDEN HARVEY
402	PAHIGIAN ANTHONY
403	PAOLUCCI A
404	PARADIS MARK
405	PARKER E
406	PARRISH PAUL
407	PATILIS GREGORY
408	PATTEE JOHN K
409	PATERSON LESTER
410	PENN AVERY
411	PERKINS DOROTHY
412	PERRON PETER
413	PETZAL ROBERT
414	PHILL BURKETT
415	PIERI RONALD
416	PIGAREK PAUL
417	POARCH JAMES
418	POLLACK KEVIN
419	PROSPERI R
420	QUIRK WILLIAM
421	RAINES DALLAS
422	RAU JOSEPH
423	REDGRAVE ALBERT
424	REED RAYMOND
425	REEDER JANET
426	REEVES LANY
427	REID ALICE
428	REIMAN KENNETH
429	RICHARDS TIMOTHY
430	RICHMOND DENNIS
431	RICHMOND JOSEPH
432	RIFF RICHARD
433	RILEY JOHN
434	RITTER WILLIAM SCOTT
435	RIVERA RUSSELL
436	ROBERTS WALTER L
437	ROBERTSON GEORGE
438	ROBICHEAUX WAYNE
439	ROCKWOOD LAURA
440	RODGERS RANDALL
441	ROFFEY ROGER
442	ROGERS MICHAEL
443	ROSS LARRY
444	ROSTOSKY EDWARD
445	ROURKE PATRICK
446	ROUSE DANNY
447	RUCKER JOHN
448	RUZZIER ROBERT
449	RYAN OTTO
450	SALAMONE MARK

Ser.	NAME
451	SAMPIER AUBREY
452	SANCHEZ FRANCISCO
453	SANDERS KEN
454	SANTORIUS JOHAN
455	SAUNDERS BOBBIE
456	SCHLOEDER HEATHER
457	SCHREIBER BEN
458	SCHMID EDWARD
459	SCHWEERS R
460	SCHWOEBELL WILLIAM
461	SEAMAN DIANE
462	SEAMAN THEODORE
463	SEARLES CRAIG
464	SEPP ERIC
465	SERVADONE STEPHEN
466	SHALABY AZIZ
467	SHAUDIES PAUL
468	SHEAFE BRAD
469	SHEARN EARL
470	SHEPPARD GAIL
471	SHERMAN W
472	SHERROW SUSAN
473	SHIELDS HANK
474	SHIELDS HENRY
475	SHIELDS WAYNE
476	SHORTT WOODY
477	SHOURBAJI AYMAN
478	SHRIEVES VAN
479	SHUTTLEWORTH
480	SILVER MARK
481	SIMAC RICHARD
482	SLANKAS JOHN
483	SMITH JMAES
484	SMITH RICK
485	SOTO-ACEVEDO RICARDO
486	SPEARS CHARLES
487	SPENCER ANDREW
488	SPERTZEL RICHARD
489	SPRINGHILL JOHN A
490	ST. LOUIS KEVIN
491	STAGG TONY
492	STALLINGS JOHN
493	STANFIELD DAVID
494	STANFIELD WILLIAM
495	STARR D
496	STEELS R
497	STEVEN DENT
498	STEVENS ROBERT
499	STINSSON DERIC
500	STOCKER JOFFREY

Ser.	NAME
501	STOKES PAUL
502	STRICKFADEN GERRY
503	STROM KEVIN
504	STROTHER JOHN K
505	STRUTHER KEITH
506	STUBBS, ROBERT
508	SWEARENGEN JAMES
509	SZILLINSKY JOHN
510	TABBAH BASSEL
511	TAYLOR JASON
512	THOMAS CANADA
513	TIBRNEY BILL
514	TIERNEY WILLIAM
515	TIM TREVAN
516	TOM BROCK
517	TOMLINSON R. L
518	TRASK THOMAS
519	TRITT RANDY
520	TROY KEVIN
521	TRUSAL LYNN
522	TSE FFRANK
523	TUCKER JONATHAN
524	TUCKER K
525	TUSKER H. E
526	UNDERWOOD DAVID
527	VADNAIS K
528	VANFLEET JOHN M
529	VANWAGNER KURT
530	VARGAS VINCENT
531	VIEBROCK JAMES
532	VINCENT DENNIS
533	WADE JOHN
534	WAGMAN JAMES
535	WALDROP GEORGE
536	WALDRUP THOMAS
537	WALKER GORDON
538	WALLACE THOMAS
539	WASINGER LESLIE
540	WEBER MARTIN
541	WEE MICHAEL
542	WEIMORTS ALBERT
543	WEISS WALTER
544	WEST C
545	WEST SAMUEL
546	WEST TERRY
547	WESTFALL LEWIS
548	WHALEY DAVID
549	WHITAKER GREGG
550	WHITE L

Ser.	NAME
551	WHITE STEVE
552	WIBBE JOHN
553	WILKINSON MICKEY
554	WILLIAM NELSON
555	WILLIAM PATRICK