DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE CIVIL ENGINEER SUPPORT AGENCY

FROM: HQ AFCESA/CES
139 Barnes Drive
Tyndall AFB FL 32403-5319

SUBJECT: **Engineering Technical Letter (ETL) 95-1: Halon 1301 Management Planning Guidance**

1. Purpose. This ETL provides guidance to help the Base Civil Engineer (BCE) and other users manage inventories of Halon 1301, an ozone depleting substance used in many facility fire protection systems. This guidance will allow Halon 1301 users to develop the transition plans necessary to implement the DoD and Air Force policies on ozone depleting substances. Attachment 3 to this ETL contains detailed instructions on how to develop a Base Halon 1301 Management Plan and comply with Air Force policies and regulations designed to minimize dependency on Halon 1301.

2. Application.

2.1. Authority. This ETL complies with the Secretary of the Air Force memorandum of 7 Jan 1993, "Air Force Ban on Purchases of Ozone Depleting Chemicals," and implements Air Force Instruction (AFI) 32-7080, *"Air Force Pollution Prevention Program."*

2.2. Effective Date: Immediately. Expires five years from date of issue.

3. Referenced Publications.

3.1. ETL 94-6, *Fire Protection Engineering Criteria - Removal of Halogenated Agent Fire Suppression Systems.*

3.2. ETL 93-5, *Fire Protection Engineering Criteria - Electronic Equipment Installations.*

3.3. Attachments 1, 2, and 3 to Headquarters Air Force Materiel Command Memorandum, Subject: *Turn-In and Requisitioning Procedures for the Defense Reserve,* 17 Oct 1994.

4. Specific Requirements. AFI 32-7080 requires the Base Environmental Manager to categorize the Halon 1301 systems on base, implement a program to remove or replace those systems, and schedule the turn-in of Halon 1301. A Base Halon 1301 Management Plan will aid this process. The Plan provides a total picture of

all facility Halon 1301 system removals and replacements, their cost, and changes in inventory by receipt, leakage, discharge, and transfers. An implementation schedule is part of the Plan to assist in keeping Halon 1301 system removals and replacements on schedule. A simple review of the schedule should show whether the base is meeting its goals, or risking negative mission impact. The Base Environmental Manager should designate a Base Halon 1301 Manager to prepare the Plan. Refer to Attachment 3 for specific guidance.

5. Point of Contact: Mr. Fred K. Walker, HQ AFCESA/CESM, DSN 523-6315, commercial (904) 283-6315, or FAX 523-6499.

Patrick C. Daugherty, PE
Director of Technical Support

6 Atch
1. Distribution List
2. ETL Index
3. Halon 1301 Management Planning Guidelines
4. Attachment 1 to AFMC Memorandum, *Turn-In and Requisitioning Procedures for the Defense Reserve,* 17 Oct 1994, "Defense Reserve Executive Summary"
5. Attachment 2 to same memorandum, "Turn-In and Requisitioning Procedures for the OCS Defense Reserve"
6. Attachment 3 to same memorandum, "Commonly Asked Questions Concerning the Defense Reserve"

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ENGINEERING TECHNICAL LETTERS (ETL)

SECTION A - CURRENT ETLs

ETL Number	Title	Date Issued
83-1	Design of Control Systems for HVAC	16 Feb 83
	Change No. 1 to ETL 83-1, U.S. Air Force Standardized Heating, Ventilating & Air Conditioning (HVAC) Control Systems	22 Jul 87
83-3	Interior Wiring Systems, AFM 88-15, Para 7-3	2 Mar 83
83-4	EMCS Data Transmission Media (DTM) Considerations	3 Apr 83
83-7	Plumbing, AFM 88-8, Chapter 4	30 Aug 83
83-8	Use of Air-to-Air Unitary Heat Pumps	15 Sep 83
83-9	Insulation	14 Nov 83
84-7	MCP Energy Conservation Investment Program (ECIP)	13 Jun 84
84-10	Air Force Building Construction and the Use of Termiticides	1 Aug 84
86-2	Energy Management and Control Systems (EMCS)	5 Feb 86
86-4	Paints and Protective Coatings	12 May 86
86-5	Fuels Use Criteria for Air Force Construction	22 May 86
86-8	Aqueous Film Forming Foam Waste Discharge Retention and Disposal	4 Jun 86
86-9	Lodging Facility Design Guide	4 Jun 86
86-10	Antiterrorism Planning and Design Guidance	13 Jun 86
86-14	Solar Applications	15 Oct 86
86-16	Direct Digital Control Heating, Ventilation, and Air Conditioning Systems	9 Dec 86
87-1	Lead Ban Requirements of Drinking Water	15 Jan 87
87-2	Volatile Organic Compounds	4 Mar 87
87-9	Prewiring	21 Oct 87
88-2	Photovoltaic Applications	21 Jan 88
88-3	Design Standards for Critical Facilities	15 Jun 88
88-4	Reliability & Maintainability (R&M) Design Checklist	24 Jun 88
88-6	Heat Distribution Systems Outside of Buildings	1 Aug 88
88-9	Radon Reduction in New Facility Construction	7 Oct 88
89-2	Standard Guidelines for Submission of Facility Operating and Maintenance Manuals	23 May 89
89-6	Power Conditioning and Continuation Interfacing Equipment (PCCIE) in the Military Construction Program (MCP)	7 Sep 89
89-7	Design of Air Force Courtrooms	29 Sep 89

ENGINEERING TECHNICAL LETTERS (ETL)

SECTION A - CURRENT ETLs

ETL Number	Title	Date Issued
90-1	Built-Up Roof (BUR) Repair/Replacement Guide Specification	23 Jan 90
90-2	General Policy for Prewired Workstations and Systems Furniture	26 Jan 90
90-3	TEMPEST Protection for Facilities Change 1 Ref: HQ USAF/LEEDE Ltr dated 20 April 90, Same Subject	23 Mar 90
90-5	Fuel and Lube Oil Bulk Storage Capacity for Emergency Generators	26 Jul 90
90-6	Electrical System Grounding, Static Grounding and Lightning Protection	3 Oct 90
90-7	Air Force Interior Design Policy	12 Oct 90
90-8	Guide Specifications for Ethylene Propylene Diene Monomer (EPDM) Roofing	17 Oct 90
90-9	Fire Protection Engineering Criteria for Aircraft Maintenance, Servicing, and Storage Facilities	2 Nov 90
90-10	Commissioning of Heating, Ventilating, and Air Conditioning (HVAC) Systems Guide Specification	17 Oct 90
91-1	Fire Protection Engineering Criteria Testing Halon Fire Suppression Systems	2 Jan 91
91-2	High Altitude Electromagnetic Pulse (HEMP) Hardening in Facilities	4 Mar 91
91-4	Site Selection Criteria for Fire Protection Training Areas	14 Jun 91
91-6	Cathodic Protection	3 Jul 91
91-7	Chlorofluorocarbon (CFC) Limitation in Heating, Ventilating and Air-Conditioning (HVAC) Systems	21 Aug 91
93-1	Construction Signs	11 Mar 93
93-2	Dormitory Criteria for Humid Areas	13 Jul 93
93-3	Inventory, Screening, Prioritization, and Evaluation of Existing Buildings for Seismic Risk	18 Aug 93
93-4	Fire Protection Engineering Criteria - Automatic Sprinkler Systems in Military Family Housing (MFH)	11 Aug 93
93-5	Fire Protection Engineering Criteria - Electronic Equipment Installations	22 Dec 93
94-1	Standard Airfield Pavement Marking Schemes	5 Apr 94
94-2	Utility Meters in New and Renovated Facilities	10 Jun 94

ENGINEERING TECHNICAL LETTERS (ETL)

SECTION A - CURRENT ETLs

ETL Number	Title	Date Issued
94-3	Air Force Carpet Standard	10 Jun 94
94-4	Energy Usage Criteria for Facilities in the Military Construction Program	19 Aug 94
94-5	Fire Protection Engineering Criteria and Technical Guidance - Emergency Lighting and Marking of Exits	8 Nov 94
94-6	Fire Protection Engineering Criteria and Technical Guidance - Removal of Halogenated Agent Fire Suppression Systems	5 Dec 94
94-7	Affirmative Procurement Requirements for Construction and Other Civil Engineering Specifications	14 Dec 94
94-8	Design in Metric	14 Dec 94
94-9	Silicone Joint Sealants for Pavements	14 Dec 94
95-1	Halon 1301 Management Planning Guidance	12 May 95

ENGINEERING TECHNICAL LETTERS (ETL)

SECTION B - OBSOLETE ETLs

ETL Number	Date	Status
82-1	10 Nov 82	Superseded by ETLs 83-10, 86-1, 87-4
82-2	10 Nov 82	Superseded by AFEPPM 88-10
82-3	10 Nov 82	Superseded by ETLs 83-5, 84-2
82-4	10 Nov 82	Superseded by ETL 84-7
82-5	10 Nov 82	Superseded by ETLs 84-1, 86-13, 86-14
82-6	30 Dec 82	Cancelled
82-7	30 Nov 82	Cancelled
83-2	16 Feb 83	Superseded by ETL 84-3
83-5	5 May 83	Superseded by ETL 84-2
83-6	24 May 83	Cancelled
83-10	28 Nov 83	Superseded by ETL 86-1
84-1	18 Jan 84	Superseded by ETL 86-14
84-2	27 Mar 84	Superseded by ETL 94-4
84-3	21 Mar 84	Cancelled
84-4	10 Apr 84	Superseded by ETLs 86-7, 86-15, 87-5
84-5	7 May 84	Superseded by ETLs 84-8, 86-11, 86-18, 88-6
84-6	Not Issued	Cancelled/Not Used
84-8	19 Jun 84	Superseded by ETL 86-11
84-9	5 Jul 84	Superseded by ETL 88-7
88-5	2 Aug 88	Superseded by ETL 91-6
86-1	3 Feb 86	Superseded by ETL 87-7
86-3	21 Feb 86	Superseded by ETL 86-4
86-6	3 Jun 86	Superseded by ETLs 86-11, 86-18, 88-6
86-7	3 Jun 86	Superseded by ETL 86-15
86-11	3 Jul 86	Superseded by ETL 88-6
86-12	3 Jul 86	Superseded by ETL 90-2
86-13	18 Aug 86	Superseded by ETL 86-14
86-15	13 Nov 86	Superseded by ETL 87-5
86-17	17 Dec 86	Superseded by ETL 89-6
86-18	18 Dec 86	Superseded by ETL 88-6
87-3	12 Mar 87	Superseded by ETLs 87-6, ETL 88-5
87-4	13 Mar 87	Superseded by ETL 94-4
87-5	13 July 87	Superseded by ETL 94-2
87-6	21 Aug 87	Superseded by ETL 88-5
87-7	14 Oct 87	Superseded by ETL 89-1
87-8	19 Oct 87	Superseded by ETL 90-1
88-1	5 Jan 88	Superseded by ETL 89-2
88-5	2 Aug 88	Superseded by ETL 91-6

ENGINEERING TECHNICAL LETTERS (ETL)

SECTION B - OBSOLETE ETLs

ETL Number	Date	Status
88-7	24 Aug 88	Superseded by ETLs 90-3, 91-2
88-8	4 Oct 88	Superseded by ETL 91-7
88-10	29 Dec 88	Cancelled
89-3	9 Jun 89	Superseded by ETL 93-5
89-4	6 Jul 89	Cancelled
90-4	24 May 90	Cancelled
91-8	24 Sep 91	Cancelled
91-3	14 Jun 91	Superseded by MIL HDBK 1008B, Jan 94
91-5	18 Jun 91	Superceded by ETL 94-5

CONSTRUCTION TECHNICAL LETTERS (CTL)

SECTION C - CURRENT CTLs

CTL Number	Title	Date Issued
88-2	DD Form 1354 Checklist	6 Jan 88
88-7	Constructibility Review Checklist	1 Nov 88
89-1	Thirty-Percent Design Submittal	10 Apr 89
89-2	MAJCOM Construction Management	30 May 89
89-3	Warranty and Guarantee Program	22 Sep 89
90-1	Management of the MILCON Planning and Execution Process	6 Mar 90
90-2	Definitions for Design Milestones	13 Mar 90

SECTION D - OBSOLETE CTLs

CTL Number	Status
87-1	Superseded by CTL 88-3
88-1	Superseded by CTL 90-1
88-3	Superseded by ETL
88-4	Replaced by Electronic Data File and Documentation in PDC/WIMS
88-5	Superseded by CTL 90-2
88-6	Issuance Cancelled

Halon 1301
Management Planning Guidelines

1. The Air Force Goal. Halon production has ceased, yet many Air Force weapon systems depend on it and will for the forseeable future. The Air Force goal is to preserve mission readiness while minimizing dependency on Halon 1301 and its release into the environment. The Air Force has taken steps to achieve this goal, as specified in Action Memorandum, 7 January 1993, from the Secretary and Chief of Staff of the Air Force implementing the Air Force ozone-depleting chemicals policy. The Air Force intends to provide half of the projected Halon 1301 War Reserve requirement with stock recovered from facility fire suppression systems.

2. Halon 1301 Management Requirements. The objective of Halon 1301 management is to ensure the availability of adequate Halon 1301 supplies through the remaining life of existing Air Force weapons systems. Facility Halon 1211 systems are not commonly used in the Air Force, but may exist in isolated instances. If present, they should be managed using these guidelines in the same manner as facility Halon 1301 systems.

2.1. Air Force Policy. The established Air Force policy on ozone-depleting substances can be summarized as follows:

> ...An Air Force waiver is required to use Halon 1301. Existing facility systems do not require waivers, but Halon 1301 must be replaced with non-gaseous alternatives through attrition, as facilities are renovated, modified, or removed from service.
>
> ...An Air Force waiver is required to purchase Halon 1301.
>
> ...Purchase of new facility Halon 1301 systems is prohibited.
>
> ...Purchase of new portable Halon 1301 fire extinguishers is prohibited.
>
> ...Halon 1301 shall not be vented intentionally into the atmosphere.
>
> ...Automatic discharge mechanisms on Halon 1301 systems shall be disabled and placed on manual activation.
>
> ...Excess Halon 1301 will be turned in to the DLA ODS (Defense Logistics Agency Ozone Depleting Substance) Bank. Transfer to other on-base facilities, bases, or commands requires a waiver.

Exception: *The MAJCOM ODS Defense Reserve POC may authorize redistribution of excess Halon 1301 within the MAJCOM for mission critical uses only.*

...Halon shall be removed from closure bases and added to the Air Force account of the DLA ODS Bank before the base is turned over to the Air Force Base Disposal Agency.

...Halon 1301 ownership cannot be sold or transferred outside the Department of Defense (DoD). A waiver is required to transfer Halon 1301 from the Air Force account to the account of another military service or DoD agency.

2.2. Additional Requirements.

2.2.1. Secure Storage. Before shipment to the DLA ODS Bank, Halon 1301 should be stored in a secure area (where available) to ensure positive control of the resource and accessibility for shipment. Mechanical rooms do not qualify.

2.2.2. Shipping. Refer to Attachment 5.

3. Halon 1301 Management Plan. The Halon 1301 Management Plan will provide the necessary tools and methods to:

- Categorize the Halon 1301 systems at each base;
- Implement a program to remove or replace those systems; and
- Schedule the turn-in of excess Halon 1301.

The Plan details whether removal/replacement schedules are on track and whether Halon 1301 inventories are being protected. Information in the Plan can justify funding for system removal/replacement projects and waivers for Halon 1301 issues from the DLA ODS Bank.

3.1. Base Halon 1301 Manager. The Base Halon 1301 Manager, appointed by the Base Environmental Manager (normally the BCE), should develop the Base Halon 1301 Management Plan. The Plan can be used to brief the BCE and staff, and help the BCE determine proper use of base resources.

3.2. Plan Elements. The Halon 1301 Management Plan contains two main elements:

- Inventory and Categorization. This element contains a set of actions to help the BCE meet Air Force requirements, such as:
  - ... determining the location and purpose of each existing facility Halon 1301 system; and
  - ... ensuring that facility Halon 1301 systems have been disabled from automatic activation.

- Programming Removal or Replacement. This element will help establish an orderly transition from the use of Halon 1301 to alternative methods of fire protection.

3.3. Plan Products. The main products in the Halon 1301 Management Plan are the:

- Halon 1301 System List and Categorization Table,
- Halon 1301 Removal/Replacement Schedule;
- Project List;
- Funding Bar Chart; and
- Implementation Schedule.

Together, these products provide a total picture of base Halon 1301 management by showing all facility Halon 1301 system removals and replacements, their cost, and changes in inventory by receipt, leakage, discharge, and transfers to the DLA ODS Bank.

4. Engineering Technical Letters. Base Halon Managers must use these guidelines together with ETL 93-5 and ETL 94-6. ETL 93-5, *Fire Protection Engineering Criteria - Electronic Equipment Installations,* provides criteria for the protection of electronic equipment from smoke and fire. ETL 94-6, *Fire Protection Engineering Criteria - Removal of Halogenated Agent Fire Suppression Systems,* provides criteria for the removal of halogenated agent fire suppression systems in electronic equipment installations. These two ETLs account for the vast majority of facility Halon 1301 systems in the Air Force. Special facility systems, such as for power generation equipment, are not addressed by these ETLs. Alternative fire protection methods are available for these special systems. Contact the Mechanical/Fire Engineering Division, Air Force Civil Engineer Support Agency, Tyndall AFB, Florida, for engineering criteria in these cases (904-283-6315; DSN 523-6315).

5. Plan Development. Development of the Base Halon 1301 Management Plan begins with a thorough physical survey and assessment of existing facility Halon 1301 systems. From the survey and assessment, the Halon 1301 systems are categorized and a prioritized Halon 1301 System Removal/Replacement Schedule is developed. Next, a funding chart is developed showing all the removal/replacement projects' costs by fiscal year. After completion of a funds distribution analysis, an implementation schedule is created to show all required Base Halon 1301 Management Plan actions.

5.1. *Step 1:* Halon 1301 Survey. The Halon 1301 Manager begins the survey by identifying the locations of all facility Halon 1301 systems on a base map, then establishing an inspection sequence. Personnel accomplishing the survey should have a working knowledge of the major components of facility fire protection

equipment and understand the purpose of the Base Halon 1301 Management Plan. Survey results can be used to:

- ensure that facility Halon 1301 systems have been disabled from automatic activation;
- categorize the type of equipment protected by the Halon 1301 system; and
- estimate the cost of a Halon 1301 removal/replacement project.

5.2. *Step 2:* Halon 1301 System List and Categorization Table. The Base Halon 1301 Manager uses the data from the equipment survey to list and categorize Halon 1301 systems. (Refer to ETL 94-6 for system category definitions.) Figure 1 illustrates how data gathered in the survey are used to develop the table. The best way to develop this-table and other charts and graphs in the Plan is with computer software incorporating spreadsheet and graphics capabilities.

5.3. *Step 3:* Halon 1301 Removal/Replacement Schedule. Developing the removal/replacement schedule gives the Base Halon 1301 Manager a complete picture of Halon 1301 inventory over time. The schedule (Figure 2) shows the anticipated Halon 1301 inventory over time as a result of removals and replacements.

5.4. *Step 4:* Project List and Funding Bar Chart. The Halon 1301 Project List shows the Halon 1301 systems to be removed/replaced (from the Halon 1301 System List and Categorization Table); the Funding Bar Chart shows how much the removals/replacements will cost, by fiscal year.

5.4.1. Halon 1301 Project List. The Base Halon 1301 Manager will develop a project list (Figure 3) for each category of equipment protected by Halon 1301 Systems. The project list includes the building and room number, Halon 1301 capacity, design and construction costs, and date of removal/replacement. Alternative system equipment costs can be obtained from an equipment manufacturer or by employing a commercial cost estimating manual or software program. To arrive at a construction cost, increase the equipment estimate by 75 percent for removal and new installation costs. This percentage can be adjusted based on the information in the equipment survey forms. Use figures based on local experience (if available) for all computations.

5.4.2. Funding Bar Chart. The Funding Bar Chart depicts all Facility Halon 1301 systems (see example, Figure 4). The general goal is to distribute spending evenly over the full length of the Plan. This can be accomplished by adjusting removal/ replacement dates in the individual Halon 1301 Removal/Replacement Schedules. However, it is important not to unduly delay the replacement of Halon 1301 systems from mission essential facilities (see ETL 94-6), since an unplanned loss of Halon 1301 in these facilities could leave them without adequate fire protection.

5.5. *Step 5:* The Implementation Schedule. The Implementation Schedule (see sample, Figure 5) is developed from information in the Project List and the Funding Bar Chart. The Implementation Schedule shows the milestones needed to ensure projects are completed by their scheduled dates. Milestones include:

- design start.
- bidding period.
- contract award time.
- construction completion.

When creating the Implementation Schedule, show fiscal years (across the top) divided into quarters. Data points should be placed on the chart in reverse order, starting with the date of removal/replacement obtained from the Project List. Allow three months for bidding and contract award with a construction time of six months for a single installation. (These numbers are only estimates and local estimates should be used, if available.)

5.6. *Step 6:* Assembling the Plan. When the Implementation Schedule is finished, all elements of the Base Halon 1301 Management Plan are complete. Figure 6, *Sample Management Plan Contents/Organization,* is an outline for organizing the Plan.

HALON 1301 SYSTEM LIST AND CATEGORIZATION TABLE
XYZ AIR FORCE BASE

Survey Date October 6, 1994

A	B	C	D	E	F	G
Building Number	Room Number	Description of Occupancy	System in Manual? (Yes/No)	Approved Waiver? (Yes/No)	Weight of Halon 1301 (Lb)	Classification of System
125	209	Training Records Computer	Yes	No	998	Mission Support
125	210	Data Entry Room	Yes	No	280	Mission Support
125	113	Personnel Records	Yes	No	930	Mission Support
1009	N/A	Maintenance Computer	Yes	No	842	Mission Support
1010	N/A	Reproduction Center	Yes	No	220	Incidental
663	105	Air Control Communications	Yes	No	1256	Mission Essential
663	105	Spare Bottles (4)	N/A	N/A	1256	Mission Essential
663	106	Command Center	Yes	No	424	Mission Essential
663	106	Spare Bottles (2)	N/A	N/A	424	Mission Essential
1213	N/A	CE Computer Center	Yes	No	1060	Mission Support
8060	N/A	Rec. Center Kitchen	No	No	344	Incidental
HALON 1301 TOTAL					8034	

Key:

A = Building Number
B = Room number of space protected
C = Short description of the protected equipment/space
D = Verification of disabled automatic discharge mechanism
E = If system has an approved Air Staff waiver
F = Weight of Halon 1301, in pounds
G = Classification: Mission Essential, Mission Support or incidental

Figure 1. Sample Completed Halon 1301 System List and Categorization Table

HALON 1301 REMOVAL/REPLACEMENT SCHEDULE
XYZ AIR FORCE BASE

Survey Date October 6, 1994

A	B	C	D	E
Project Number	Description of Activity	Fiscal Year of Activity	Transaction Weight of Halon 1301 (Lb)	Halon 1301 Inventory Balance (Lb)
XYZR951361	Place Bldg 8060 System in Manual Activation.	1995	0	8034
XYZR951361A	Ship Bldg 8060 Halon 1301 to AF Depot. Abandon piping. Modify control panel.	1995	344	7690
XYZR951734	Ship Bldg 1010 Halon 1301 to AF Depot. Abandon piping. Modify control panel.	1995	220	7470
XYZR951799	Ship Bldg 1009 Halon 1301 to DLA ODS Bank. Remove piping and modify control panel.	1995	842	6628
XYZR960551	Upgrade Bldg 663 fire protection systems to ETL 93-5 requirements for mission essential. Ship installed Halon 1301 to DLA ODS Bank (1256 & 424 Lb). Ship spare bottles to DLA ODS Bank (1256 & 424 Lb).	1996	3360	3268
XYZR970041	Ship Bldg 125, Rooms 209 & 210 Halon 1301 to DLA ODS Bank (998 & 280 Lb). Remove piping and modify control panel.	1997	1278	1990
XYZR970041A	Upgrade Bldg 125, Room 113 fire protection system to ETL 93-5 requirements for mission support. Remove piping and modify control panel. Ship installed Halon 1301 to DLA ODS Bank.	1998	930	1060
XYZR980013	Request MAJCOM approval and upgrade Bldg 1213 fire protection system to ETL 93-5 requirements for mission essential. Remove piping and modify control panel. Ship installed Halon 1301 to DLA ODS Bank.	1998	1060	0

Key:
A = Assigned Project Number
B = Manually input removal/replacement activities
C = Fiscal year
D = Halon removed, lost, transferred or received
E = Balance after removal/replacement activity

Figure 2. Sample Completed Halon 1301 Removal/Replacement Schedule

HALON 1301 PROJECT LIST
XYZ AIR FORCE BASE

Survey Date October 6, 1994

Project Number	Building Number	Room Number	Weight of Halon 1301 (Lb)	Project Costs		Scheduled Removal/ Replacement (End of Qtr & FY)
				Design and Analysis ($)	Construction ($)	
XYZR951361	8060	N/A	0	50	0	1st Qtr 1995
XYZR951361A	8060	N/A	344	250	500	3rd Qtr 1995
XYZR951734	1010	N/A	220	300	500	3rd Qtr 1995
XYZR951799	1009	N/A	842	1,000	3,000	4th Qtr 1995
XYZR960551	663	105	2512	5,000	20,000	2nd Qtr 1996
XYZR960551	663	106	848	4,000	18,000	4th Qtr 1996
XYZR970041	125	209	998	1,000	3,500	1st Qtr 1997
XYZR970041	125	210	280	900	2,500	2nd Qtr 1997
XYZR970041A	125	113	930	3,000	5,900	2nd Qtr 1998
XYZR980013	1213	N/A	1060	9,000	28,000	4th Qtr 1998
COST TOTALS				$24,500	$81,900	

Figure 3. Sample Completed Project List

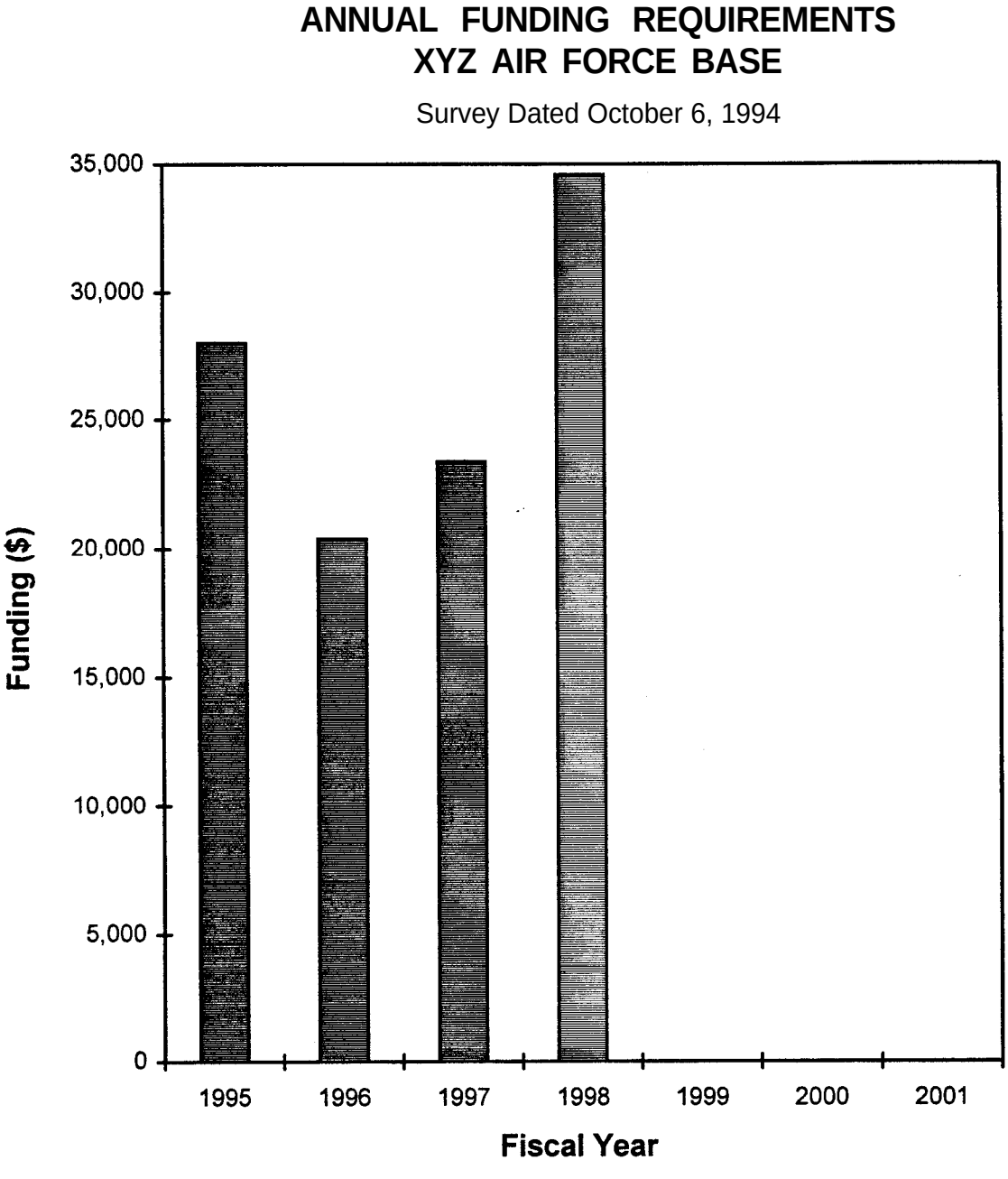

Figure 4. Sample Completed Funding Bar Chart

IMPLEMENTATION SCHEDULE
XYZ AIR FORCE BASE
Survey Date October 6, 1994

FISCAL YEAR		1995				1996				1997				1998				1999	2000
Quarter		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Project No./Building No.																			
XYZR951361	EVENTS	C,F																	
8060	COST	50																	
XYZR951361A	EVENTS	C,D	E	F															
8060	COST	250	500																
XYZR951734	EVENTS	C,D	E	F															
1010	COST	300	500																
XYZR951799	EVENTS	C	D	E	F														
1009	COST	1000		3000															
XYZR960551	EVENTS		C	D	E		F												
663, Rm 105	COST		5000		20000														
XYZR960551	EVENTS			C		D	E		F										
663, Rm 106	COST			4000			18000												
XYZR970041	EVENTS						C	D	E	F									
125, Rm 209	COST						1000		3500										
XYZR970041	EVENTS							C	D	E	F								
125, Rm 210	COST							900		2500									
XYZR970041A	EVENTS									C	D		E		F				
125, Rm 113	COST									3000			5900						
XYZR980013	EVENTS										C		D	E			F		
1213	COST										9000			28000					
COST TOTALS		1600	6000	7000	20000	0	19000	900	3500	5500	9000	0	5900	28000	0	0	0	0	0

EVENTS:

C = Design Start
D = Bid Process: 3 months
E = Award Contract: 3 months
F = Construction Complete

Figure 5. Sample Completed Implementation Schedule

• Title Page

... Includes title of plan, base name, date, and preparer's name, office symbol, and phone number.

ž Executive Summary

... One page detailing the highlights of the Base Halon 1301 Management Plan. This could include how much money over how many years the Base Halon 1301 Management Plan will take and whether any significant problems are left unresolved requiring senior-level action.

ž Base Halon 1301 Management Plan Review

... Gives a verbal picture of the Base Halon 1301 Management Plan. Describes in more detail some of the items discussed in the Executive Summary. Should include the base's ability to execute the plan, funding requirements, number of projects required, and other pertinent information. Gives an overview of the plan's organization, describing what each section addresses.

ž Base Halon 1301 Management Plan Products

... Begins with a brief explanation of Base Halon 1301 Management Plan Products, followed by the:

- Project List
- Funding Bar Chart
- Implementation Schedule
- Halon 1301 Removal/Replacement Schedule
- Halon 1301 System List and Categorization Table
- Equipment Survey Data, including base map

Figure 6. Sample Management Plan Contents/Organization

DEFENSE RESERVE
EXECUTIVE SUMMARY

Definition: The Defense Reserve will be the Air Force's future source of supply for Class I Ozone Depleting Substances (ODSs) for mission critical applications when commercial sources of supply are no longer available. The Defense Reserve will store Halon 1202, 1211, and 1301, Refrigerants R-11, R-12, R-114, R-500, R-502, and very limited solvents when fully justified (see solvent section).

Background: In response to the requirements of the Montreal Protocol and the National Defense Authorization Act for Fiscal Year 1993, Title III, section 326 (Public Law 102-484), DOD developed the concept of an ODS "bank" with buy-in from all the services. The Chief of Staff for the Air Force endorsed the concept in his action memorandum on 7 Jan 93 which provided Air Force policy on ODSs. The Defense Logistics Agency (DLA) was assigned the mission of managing the ODS bank, which is more formally known as the Defense Reserve, to ensure that future ODS supplies for mission critical uses are available through the year 2035. DLA will provide central management through the Defense General Supply Center (DGSC) in Richmond Virginia and will be responsible for the receipt, reclamation, storage, and issue of ODSs. The Defense Depot Richmond Virginia (DDRV) will be the storage site for the Defense Reserve. DLA tasked Richmond because DGSC has management responsibility for gas and cylinders and DDRV has cylinder refurbishment and hazardous storage capability.

Objective: The basic objective of the Defense Reserve was to take a Joint Service Approach to ensure a future source of ODSs will be available to all the services. DLA is accountable to each service and will take advantage of the existing systems already in place. DOD believed savings could be realized through economies of scale and by eliminating duplication of effort. It was presumed that each service would have to make large ODS purchases to satisfy internal mission essential requirements. By consolidating service buys, economies of scale should be obtained.

Acquisition Strategy: DLA's acquisition strategy is based on service identified mission critical requirements which will be satisfied by both internal service turn-ins of excess ODSs and new procurement. Determining accurate future requirements is critical to the Air Force since the Defense Reserve will be the only location where ODSs can be obtained for the continued operations of the weapon systems. If requirements are not adequately defined, stock shortages are possible. It is very important to emphasize service turn-ins since it is a key element of stocking the Defense Reserve. As systems and equipment are decommissioned and removed from service, excess non-mission critical Halons and refrigerants will be appropriately contained and turned-in to the Defense Reserve where DLA will reclaim, store, and re-issue ODSs when required.

Solvents: The Deputy Under Secretary of Defense for Environmental Security (DUSD(ES)) signed out a directive on 4 Jan 94, requiring full justification for each solvent proposed for Defense Reserve storage. Full justification requires that 5 in-depth questions be answered for each application. DUSD(ES)'s intent is not to bank solvents unless a commercially available substitute is not available. A decision will be made on a case-by-case basis by DUSD(ES)

whether a solvent can be banked in the Defense Reserve or not. The Defense Reserve will not accept solvents for turn-in since they do not have solvent reclamation capability.

Current Status: The Defense Reserve is currently accepting excess ODSs from the Services. They are currently capable of performing receipt, storage and issue functions. The Defense Reserve will operate very similarly to the normal flow of repairables from the field to Depot repair facilities and back to the field. The Defense Reserve is accepting both dirty and virgin chemicals. However, all chemicals received will be considered dirty and will be reclaimed by DGSC to MILSPEC standards.

Accountability for the Defense Reserve will be maintained at DGSC on the National Inventory Record. Material turned in by each Service or purchased for a Service will be identified on the National Inventory Record by Service ownership code. Issues to each Service will be from that particular Service's on-hand quantity.

Operational dates: Halons and refrigerants are being accepted for turn-in now. Halons are available for issue from the Defense Reserve now. Refrigerants will be available from the Defense Reserve after 31 Dec 95.

Requisitioning: There are three requirements before requisitioning from the Defense Reserve is approved: The requirement must be mission critical, an approved AF waiver is required and the Department of Defense Activity Address Code (DODAAC) from the requisitioning supply organization must be forwarded to DLA by HQ AFMC/LG.

FMS: The Defense Reserve will not support FMS requirements. The Reserve was set up to support only the United States DOD requirements. FMS requirements will be handled separately.

TURN-IN AND REQUISITIONING PROCEDURES FOR THE ODS DEFENSE RESERVE

BACKGROUND INFORMATION

The ODS Defense Reserve was established for DoD mission-critical weapon systems support. It will supply refrigerants and Halons when commercial sources are not available. The Defense Reserve consists of ODSs recovered from decommissioned or replaced systems and new procurements. The intent is to recover and reclaim ODSs as an alternative to new manufacture. New procurement will be used only when the amount of reclaimed material is insufficient to supply the requirement specified by the Service/Agency.

It is imperative that the AF recover and turn-in to the Defense Reserve all excess refrigerants and Halons for the establishment of the Defense Reserve. The Defense Reserve will stock and accept for turn in only the following pure chemicals:

Halons: 1202, 1211, 1301
Refrigerants: CFC-11, 12, 114, 500, 502

The Defense Reserve will remain active until all weapon systems using ODSs are replaced or retired (Note, the term Ozone Depleting Substances (ODSs) is the same as the Air Force term Ozone Depleting Chemicals (ODCs)).

ODS War Reserve Management is not covered by this document and will be addressed at a later date. The Defense Reserve will not support Foreign Military Sales (FMS) ODS requirements. FMS customer ODS programs will be funded and managed separately from the Defense Reserve. For FMS requirements contact Ed Primm, AFSAC/XMX, DSN 787-2261.

I. Previous Guidance

This information enhances and should be used in conjunction with other ODS policy guidance. This package supersedes the following guidance outlined in these messages and letter:

a. HQ AFMC/LGS msg, 231811Z JUN 93, 3-part message.

b. HQ AFMC/LGS ltr, 28 Oct 93, Subj: Procedures for Returning Ozone Depleting Substances (ODS) to the Defense Reserve.

c. HQ AFMC/LGS msg, 112033Z APR 94, Subj: Defense Reserve Requisitioning and Turn-in Process Update.

d. HQ AFMC/LGS msg, 181822Z MAY 94, Subj: Ozone Depleting Chemical Requisition and Turn-in Procedure Update.

II. Points of Contact

The information contained in this document should cover most circumstances relating to the turn-in and requisitioning procedures for the Defense Reserve. However, if more information or clarification is needed, the points of contact are as follows:

AIR FORCE DEFENSE RESERVE POCS

Mr. Tom Lorman, Ms. Debbie Meredith, or Mr. Alex Briskin, HQ AFMC/LGSH
DSN 787-3487/3078 or 513-257-3487/3078

DEFENSE LOGISTICS AGENCY (DLA) POCS

Defense Reserve Project Officer	Policy and Procedures	Requisitions and Stock Availability
Mr. Ron Sibley, DGSC-RP	Mr. Steve Minus, DGSC-RP	Ms. Audrey Studevant, DGSC-OMBB
DSN 695-4585 or 804-279-4525	DSN 695-5203 or 804-279-5203	DSN 695-3756 or 804-279-3756

AF MAJCOM DEFENSE RESERVE POCS

HQ AFRES/LGMAA (PAUL WHITE)
155 2ND STREET
ROBINS AFB GA 31098-1635
DSN: 497-1645 COMM:(912)327-1645

HQ ACC/LGOV (CHARLES NAULT)
(ALTERNATE BRUCE STEVENS 574-9460)
11817 CANON BLVD, SUITE 310
NEWPORT NEWS, VA 23606
DSN: 574-9455 COMM:(804)764-9455

HQ USAF/LGMM
(GREG STANLEY)
1030 AIR FORCE PENTAGON
WASHINGTON DC 20330-1030
DSN: 225-0844 COMM:(703)695-0844

HQ AFSPACECOM/LGM(MAJ MICHAEL KELLY)
150 VANDENBERG ST, SUITE 1105
PETERSON AFB CO 80914-4470
DSN: 692-3121 COMM:(719)554-3121

HQ PACAF/CEVP (BILL CABANLIT)
25 E STREET, SUITE D-306
HICKAM AFB HI 96853-5412
DSN: 448-6694 COMM:(808)448-6694

HQ USAFA/LGS (TERRY VEN ROY)
INDUSTRIAL DRIVE, SUITE 110
HQ USAFA/CEVV (DIANA DEAN)
8120 EDGERTON DRIVE, SUITE 40
USAF ACADEMY CO 80840-2400
DSN: 259-2289 COMM:(719)472-2289

HQ AFSOC/LGMW (KAREN STRICKLAND)
100 BARTLEY STREET
HURLBURT FIELD FL 32544
DSN: 579-2090 COMM:(904)884-2090

HQ AETC/LGMTS (MONICA FIELDS)
(ALTERNATE SMSGT ZUNIGA 487-5697)
555 E STREET, EAST
RANDOLPH AFB TX 78150-4440
DSN: 487-2086 COMM:(210)652-2086

HQ AFMC/LGSH (THOMAS LORMAN, ALEX BRISKIN OR DEBBIE MEREDITH)
4375 CHIDLAW ROAD, SUITE 6
WRIGHT-PATTERSON AFB OH 45433-5006
DSN: 787-3487/3078 COMM:(513)257-3487/3078

HQ USAFE/CEV (LT FRANK TITUS)
UNIT 3050, BOX 10
APO AE 09094-5010
DSN: 480-6432

HQ ANGRC/LGSP (CAPT BILL LESLIE)
3500 FETCHET AVE
ANDREWS AFB MD 20344-6008
DSN: 858-8448 COMM:(301)981-8448

HQ AMC/CEVP (MARK HORSTMAN)
(ALTERNATE LGSMSP JIM NYE 576-3538)
507 A STREET
SCOTT AFB IL 62225-5308
DSN: 576-5763 COMM:(618)256-8332

ODS TURN-IN INFORMATION

When an installation has determined it has excess ODSs it should first contact its MAJCOM Defense Reserve POC (e.g. LG, CE) for possible redistribution of excesses within the MAJCOM (for mission critical uses only). When another Air Force organization has a requirement for the excess ODS, the receiving organization should pay for shipment to the installation if redistribution is authorized. A fund cite must be provided by the receiving organization to the shipping activity prior to shipping. If there are no MAJCOM installations requiring the excess ODSs, turn in the excess to base supply for direct shipment to the Defense Reserve. For obvious excesses, the demand level should be removed from supply and shipped to the Defense Reserve (after contacting the MAJCOM). There is no reason to hold the excess for 365-730 days. ODSs shall not be sold (or given away) to private industry or turned in to the Defense Reutilization and Marketing Office (DRMO) per HQ USAF/CEV msg. 141200Z APR 94.

Please note, a new retention policy defining and addressing excesses will be published in the Jan-Feb 95 time frame. The new policy sets shorter periods of time for identifying when an item that has no demand history will be considered excess. The new times are 12 or 24 months depending on the mission impact code. The policy will be located in AFM 67-1, Volume II, Part Two, Section F, Paragraph 101.

I. Policy and Procedures

a. No authorization/pre-notification is needed when turning in ODSs to the Defense Reserve. Various types of cylinders containing ODSs will be accepted in the Defense Reserve to include fire extinguishers, spheres, and canisters. The Defense Reserve will accept the prescribed ODSs in any condition and will reclaim them to meet MILSPEC and MILSTD requirements.

b. Government recovery cylinders for ODSs turned in to the Defense Reserve are available free of charge through DGSC. Only recovery cylinders should be used for recovering ODSs from systems. They can be requisitioned by following normal MILSTRIP procedures and including a "2E" advice code on the requisition. However, the Defense Reserve is capable of accepting any cylinder, including contractor-owned cylinders. The Defense Reserve will recover the ODS and return contractor-owned cylinders when this is necessary. Table I on the following page contains NSNs for requisitioning empty recovery cylinders from DGSC. The Government cylinders used for recovering CFC refrigerants are painted orange and Halons are usually red with gray and/or white strips. Both have yellow tops and dual port or 2 valves to distinguish them from single port valve standard virgin cylinders. Table II contains the NSNs for cylinders containing recovered refrigerants and Halons. These new NSNs should be used for turning in excess ODSs to the Defense Reserve.

TABLE I - ODS NSNs
(Free Issue)

EMPTY RECOVERY CYLINDER NSNs

PRODUCT	CYLINDER CAPACITY SIZE (LBS)	EMPTY RECOVERY CYLINDER NSNs
REFRIGERANTS		
R-11	59	8120-01-356-5960
	170	8120-01-356-9756
	1400	8120-01-355-9763
R-12	45	8120-01-355-4017
	145	8120-01-355-4018
	1190	8120-01-355-4019
R-114	57	8120-01-356-1245
	165	8120-01-356-1246
	1350	8120-01-356-1247
R-500	43	8120-01-357-6774
	27	8120-01-357-7656
	1045	8120-01-357-7657
R-502	44	8120-01-357-6770
	128	8120-01-357-6771
	1050	8120-01-357-6769
HALONS		
1202	160	8120-01-356-1781
1211	200	8120-01-356-1248
	1500	8120-01-356-1249
1301	117	*8120-01-371-0533
	150	8120-01-356-5963
	1240	8120-01-356-5962

*** DENOTES A HIGH PRESSURE CYLINDER OF 600 PSI PLUS**

TABLE II - NSNs FOR CYLINDERS CONTAINING RECOVERED REFRIGERANTS, FIRE EXTINGUISHERS, AND HALONS TO BE TURNED IN TO THE DEFENSE RESERVE

PRODUCT	CYLINDER CAPACITY SIZE (LBS)	NSNs FOR THE CYLINDER CONTAINING RECOVERED CHEMICALS
REFRIGERANTS		
R-11	59	6830-01-355-9754
	170	6830-01-355-9756
	1400	6830-01-355-9758
R-12	45	6830-01-355-4013
	145	6830-01-355-6648
	1190	6830-01-355-4015
R-114	57	6830-01-356-1203
	165	6830-01-356-1205
	1350	6830-01-355-1207
R-500	43	6830-01-357-7650
	127	6830-01-358-5123
	1045	6830-01-357-7654
R-502	44	6830-01-357-6726
	128	6830-01-357-6727
	1050	6830-01-357-6905
HALONS AND FIRE-EXTINGUISERS		
1211	1-5	6830-01-376-8013
	6-10	6830-01-376-8014
	11-20	6830-01-376-8015
	21-60	6830-01-376-8016
	61-125	6830-01-376-8017
	126-200	6830-01-356-1209
	201-340	6830-01-376-8018
	341-1500	6830-01-356-1211
1202	160	6830-01-356-1780
1301	1-5	6830-01-376-8394
	6-10	6830-01-376-8395
	11-20	6830-01-376-8396
	21-70	6830-01-376-8397
	71-100	6830-01-376-8398
	101-117	6830-01-371-0501
	118-125	6830-01-376-8399
	126-150	6830-01-356-9752
	151-200	6830-01-376-8400
	201-261	6830-01-376-8401
	261-350	6830-01-376-8402
	351-530	6830-01-376-8403
	531-600	6830-01-376-8404
	601-1240	6830-01-356-5958

c. All ODS cylinders returned to the Defense Reserve must be tagged/labeled using DD Form 1574 or DD Form 1574-1 as follows:

1) Branch of Service
2) Record the shipper's Department of Defense Activity Address Code (DODAAC). *(DODAACs can be obtained from base supply.)*
3) Point of contact and telephone number
4) Appropriate cylinder(s) NSN containing the recovered ODS (Table II)
5) Type of ODS (i.e. Halon 1301 or CFC-12)
6) Quantity of cylinders and pounds contained within the shipping container
7) Apply a warning/hazardous label to the cylinders in compliance with Department of Transportation regulations.

NOTE: If like NSN ODS cylinders, spheres, canisters, or fire extinguishers are shipped palletized or in a box or container, only one tag/label is required for the entire shipment. The crate, box, or pallet should be tagged using DD Form 1574 or DD Form 1574-1. Do not stencil the cylinders. The crate, box or pallet used for shipment must be no larger than the size of a normal pallet for forklift or pallet-jack handling at the Defense Reserve receiving activity.

d. Tagging of single cylinders should be the same as described in c. above. The completed DD Form 1574 or DD Form 1574-1 should be placed under the cylinder protective cap.

e. Once the recovery cylinder has been properly tagged, MILSTRIP regulation DoD 4000.25-1-M, Chapter 9 provides instructions for returning material using the DD Form 1348-1 or 1348-la (Please note, the DD Form 1348-1/1a is for Air Force use to process the shipment. The DD Form 1348-1/1a is not needed by DGSC-RP). The AF applicable regulations are AFM 67-1, Vol. I, Part One, Chapter 3 and AFM 67-1, Vol. II, Part Two, Chapter 15. Attachment 1 is a guidance package for completing the DD Form 1348-1 for ODS Returns.

f. Fire suppression system cylinders and canisters with electrical charges or initiators must be deactivated prior to shipment to the Defense Reserve. Also, safety caps must be used to cover exposed actuation mechanisms and discharge ports on these special cylinders, otherwise dangerous safety situations could arise during the shipping, receiving, or storage process. Reference HQ AFCESA/DF msg, 261501Z APR 94, SUBJ: PREPARING AND SHIPPING FACILITY HALON FIRE SUPPRESSION CYLINDERS.

g. Monetary credit will not be given for turned in ODSs or cylinders. However, ownership credit will always be given to the AF for their pounds of ODSs and will only be issued to AF customers. Government cylinders returned to the Defense Reserve will remain the property of the AF and issued free for recovering ODSs. Once reclaimed, the ODSs can be requisitioned from the Defense Reserve by AF authorized activities and the cylinders can be reissued as needed.

h. Empty recovery and standard cylinders can be turned in to the Defense Reserve. There is a particular need for 1500 pound Halon cylinders. If you are unsure whether the cylinder is Government-owned, return it anyway.

i. All unused Halon 1211 stock internal to the Air Force is believed to be excess and should be shipped to the Defense Reserve.

II. ODS Transportation Guidance

a. When shipping ODSs refer to the following regulations if needed:

1) MIL-STD 129L, Military Standard Marking for Shipment and Storage.
2) DLAR 4145.25, Storage and Handling of Compressed Gases and Liquids in Cylinders, and of Cylinders or AFR 67-12.
3) Code of Federal Regulations 49, 173.301, Requirements for the Shipment of Compressed Gas Cylinders.
4) DoD Regulation, 4000.25-1-M and/or AFM 67-1, Vol. I, Part One, Chapter 3 and/or AFM 67-1, Vol. II, Part Two, Chapter 15.

b. All excess ODSs should be shipped to the following address:

DLA - Defense Depot Richmond Virginia
SW0400
Cylinder Operations
8000 Jefferson-Davis Highway
Richmond, VA 23297-5000

c. Through FY95, DLA will fund the transportation cost for excess ODS turn-ins to the Defense Reserve when the cost is above $500.00. For costs between $250.00 and $500.00, the funding will be on a case-by-case basis. Users must contact DGSC-RP, Policy and Procedures, Mr. Steve Minus, DSN 695-4525 or 804-279-4525 to make arrangements for funding before shipments are made. The information that DGSC-RP needs within a minimum of 5 working days before shipment is: 1) a cost estimate, 2) the NSNs and quantity of the items being shipped, 3) DODAAC, and 4) the base point of contact. When DLA funds the shipment to the Defense Reserve, a MIPR fund cite will be given to the customer. After FY95, the base shipping the ODS will be required to pay the shipping costs.

ODS REQUISITIONING INFORMATION

ODSs stocked within the Defense Reserve are critical resources and only activities designated by the Air Force will be able to requisition shipments from the Defense Reserve. Halons are out of production and currently available through the Defense Reserve. Refrigerants are being produced commercially through 31 Dec 95. As long as they are available on the open-market, the Defense Reserve will not be used to supply refrigerants. Air Force policy is to preserve the Defense Reserve and obtain the refrigerants through normal channels using a waiver. After 31 Dec 95 the Defense Reserve can be used to obtain refrigerants.

ODS NSNs will be installed in the DGSC automated supply system alongside a record of approved requisitioners/users for the Air Force. Requisitions submitted to DGSC by non-approved requisitioners/users will not be processed and will generate Supply Status Code "D8" to the requisitioner, advising that the ordered materiel is a commodity requiring advance authorization,

I. Policy and Procedures

a. When an organization needs to requisition an ODS, the AF requires three conditions to be met:

1) The organization must be using the ODS for a MISSION CRITICAL application. Mission Critical is defined as stated in DODI 5000.2, Part 15, page 15-11. This definition was stated in the Apr 94 ODS Data Call and the Air Force will continue to use this definition.

> "A system whose operational effectiveness and operational suitability are essential to successful completion or to aggregate residual combat capability. If this system fails, the mission likely will not be completed. Such a system can be an auxiliary or supporting system, as well as a primary mission system."

2) The organization's required quantity must be covered under an approved AF waiver. An approved Air Force waiver is required before an ODS can be requisitioned. We anticipate current waivers will be extended through 31 May 95. The MAJCOM/field units should stay abreast of current AF waiver policy and ensure waivers exist for their processes as needed. For further information on waivers, base level organizations should contact their MAJCOM ODS focal point; Single Managers should contact HQ AFMC/ENSE, DSN 787-0348.

3) The organization's requisitioning activity (supply account) must have their Department of Defense Activity Address Code (DODAAC) on the AF Authorized Users List managed by HQ AFMC/LGSH. The concept of an Authorized Users List allows the Air Force to control consumption or access to critical resources to the DODAAC level. Once a waiver is approved, the waiver OPR is responsible for forwarding the DODAACs for the authorized organizations/users to HQ AFMC/LGSH with the waiver number, NSN requested, and allocation quantity, in pounds, for the requirement(s). HQ AFMC/LGSH has compiled an Authorized Users List for the currently approved waivers. This listing contains approved DODAACs for the

Defense Reserve and is updated and forwarded to DGSC as necessary. The Authorized Users List is a final check by DGSC to ensure the requisitioner is approved for an ODS issue. DODAACs can be obtained through base supply.

b. The organization should contact its MAJCOM ODS focal point (e.g., LG, EM, CE) for requisitioning support through the redistribution of existing ODS stocks within the MAJCOM.

c. If there are no MAJCOM ODS supplies available and all three conditions above are met, the organization can requisition from the Defense Reserve according to normal MILSTRIP procedures. Data requirements unique to ODS requisitions are detailed below.

d. Current funding policy is that ODSs requisitioned from the Defense Reserve are "free issue". Starting in FY96, DLA will include a service charge on a fee-for-poundage basis for each issue to reimburse DLA for the handling, storage, shipping, and reclaiming costs associated with the Defense Reserve.

e. There are no base-level or MAJCOM reports associated with the Defense Reserve. However, DGSC will provide a summary of transactions to HQ AFMC/LGSH on a monthly basis.

II. ODS Requisitioning Guidance

a. Table III on the following page provides a listing of the National Stock Numbers (NSNs) for refrigerants and Halons and the cylinders in which these ODSs reside. These are the only NSNs that can be currently requisitioned from the Defense Reserve.

b. The following special data entries to a DD Form 1348-1 are required for requisitions submitted to the Defense Reserve for an ODS:

1) Enter "S9G" for Routing Identifier Code in record positions 4-6. This directs requisitions to the Defense Reserve Manager at DGSC - Richmond.

2) Enter "GDB" for Project Code in record positions 57-59.

3) Enter "SRG" in record positions 67-69. This directs issue transactions to the Defense Reserve held at the DGSC- Richmond's storage depot.

4) Enter "6" for Air Force Ownership Code in record position 70.

5) Enter "A" for Condition Code in record position 71.

c . If further requisitioning information is required, contact the Requisition Assistance Hotline, DSN 279-4865 or HQ AFMC/LGSH, DSN 787-3487/3078.

TABLE III
NSNs FOR REQUISITIONING ODSs FROM THE DEFENSE RESERVE

COMMODITY	CYLINDER CAPACITY SIZE (LBS)	NATIONAL STOCK NUMBER (NSN)
Halon 1202	160	6830-00-985-7284
Halon 1202	1500	6830-01-370-8671
Halon 1211	200	6830-00-285-5887
Halon 1211	1500	6830-01-219-8529
Halon 1301	150	6830-00-543-6623
Halon 1301	1240	6830-01-356-9751
R-11	59	6830-01-355-9749
R-11	171.5	6830-01-355-9750
R-11	1400	6830-01-355-9735
R-12	10	6830-00-264-9089
R-12	25	6830-00-292-0147
R-12	45	6830-00-264-5913
R-12	145	6830-00-292-0133
R-12	1190	6830-01-355-4011
R-114	11.5	6830-00-290-4378
R-114	57	6830-00-290-4379
R-114	165	6830-00-782-6232
R-114	1360	6830-01-356-1201
R-500	43	6830-01-357-7648
R-500	127	6830-01-357-7646
R-500	1045	6830-01-357-9135
R-502	128	6830-00-138-2482
R-502	1050	6830-01-357-6903

COMMONLY ASKED QUESTIONS CONCERNING THE DEFENSE RESERVE

1. **What is the Defense Reserve?** The Defense Reserve is a "bank" of ozone depleting substances (ODS) for DoD mission critical weapon system support. It will be a source of supply for refrigerants and Halon when commercial sources are not available.

2. **Who manages the Defense Reserve**? The Defense Logistics Agency (DLA) was assigned the mission of managing the Defense Reserve of ODS (refrigerants and Halons) to ensure that future supplies for mission critical uses are available when they are no longer produced. DLA will provide central management for the receipt, storage and issue through the Defense General Supply Center (DGSC).

3. **Where will the chemicals be stored?** The Defense Depot Richmond (DDRV) will be the storage site for the Defense Reserve. DLA tasked Richmond because DGSC has management responsibility for gas and cylinders and DDRV has cylinder refurbishment and hazardous storage capability.

4. **What is the difference between the Defense Reserve, the DoD or DLA Bank, and the Strategic Reserve**? Nothing; the terms are synonymous with each other. However, the Defense Reserve is the preferred terminology.

5. **What is the difference between ODC, ODS, and OLDS?** Nothing; all terms are synonymous. ODC stands for ozone depleting chemicals, ODS stands for ozone depleting substances, and OLDS stands for ozone layer depleting substances.

6. **When will the Defense Reserve be operational?** The Defense Reserve is currently operational. They are currently accepting excess Halons and refrigerants from the Services. They are also currently capable of performing receipt, storage, reclamation and issue functions. They are currently issuing Halons.

7. **What are excess non-mission critical ODSs?** Excess non-mission critical ODSs are defined as Halons and refrigerants which are recovered from decommissioned or replaced systems (including facilities) or ODSs that come from base closures.

8. **What types of cylinders will DLA accept when returning refrigerants and Halons to the Defense Reserve?** Refrigerants and Halons should be returned using government recovery cylinders which can be requisitioned through normal MILSTRLP stock ordering procedures. However, DLA is prepared to accept all types of cylinders if transferring the ODS to a recovery cylinder is not practical.

9. **Where can recovery cylinders be obtained?** DGSC will furnish a requesting organization empty Government recovery cylinders for ODSs at no charge as long as the purpose is to turn in an excess ODS to the Defense Reserve. They can be requisitioned by following normal MILSTRIP procedures. Use a "2E" advice code on the requisition. See the *ODS TURN-IN INFORMATION SHEET*.

10. **Are there any safety precautions required before shipping ODS cylinders to the Defense Reserve?** Yes; fire suppression system cylinders and canisters with electrical charges or initiators must be deactivated prior to shipment to the Defense Reserve. Safety caps must also be used to cover exposed actuation mechanisms and discharge ports on these special cylinders.

11. **Will monetary credit be given for the ODS turned into the Defense Reserve?** No monetary credit will be given for either the chemical or cylinders. However, ownership credit will be given to the respective Service for the ODS.

12. **Will DLA require a waiver before requisitioning is approved from the Defense Reserve?** No. An approved list of authorized users has been provided to DLA from HQ AFMC. This list was generated from the approved AF waivers and is being continually updated.

13. **How will DGSC know if the requisition is from an authorized user?** DGSC will screen the Department of Defense Activity Address Code (DODAAC) against a Service List of authorized users for a particular NSN. (The AF list will be generated by the approved waivers and provided to DGSC by AFMC.) The Selective Edit Control Table will be used to identify the DODAACs and NSNs which will be allowed to process against Defense Reserve on hand quantities.

14. **What will happen if the requisitioner is not on the authorized list?** The requisition will be returned unfilled with status code D8.

15. **How does one become an authorized user who can requisition from the Defense Reserve?** A waiver must be completed and approved by the waiver approval authority (AF/CE, AF/LG, or SAF/AQ) before requisitioning from the

Defense Reserve is authorized. Then an approved DODAAC must be given to HQ AFMC/LGSH for authorization purposes.

16. **How can a DODAAC be obtained?**

a. Through base supply (DODAAC is also known as a SRAN)

b. For contractors, where Government furnished ODSs are stipulated in the contract, the contracting officer should contact the Air Force wide DODAAC office, 88 ABW/LGTX-2, 5215 Thurlow St, Suite 1, Wright-Patterson AFB OH 45433-5541, DSN 787-7136.

17. **Will DLA ship ODSs direct to contractor facilities where Government Furnished Material (GFM) is required?** Yes, provided the use is mission-critical, the contractor has a DODAAC on the AF Authorized Users List, and the use is covered by an approved waiver.

18. **What types of chemicals will be stored in the Defense Reserve?** The only chemicals that are currently part of the Defense Reserve are:

Halon 1202, 1211, and 1301
Refrigerant R-11, R-12, R-114, R-500, and R-502

19. **Will the Defense Reserve accept other chemicals such as solvents?** DLA will only store solvents for an application that has been fully justified. For justification criteria contact HQ AFMC/LGSH at DSN 787-3487/3078. DLA will not accept solvents for turn-in.

19. **Will the Defense Reserve accept dirty chemicals?** Yes. The Defense Reserve will accept both dirty and virgin Halons and refrigerants. All chemicals received will be considered dirty and will be reclaimed by DGSC to MILSPEC standards. The Defense Reserve will not accept dirty solvents.

20. **Will the Defense Reserve issue dirty chemicals if a service wants to clean it themselves?** No; all chemicals will be reclaimed before issuing.

21. **What is the difference between reclaim and recycled?** Reclaim is when a chemical is cleaned and brought back to a certain standard. Recycled is only a partial cleaning. Recycling is much cheaper than reclaiming.

22. **Can the chemicals in the Defense Reserve be used for non-mission critical applications** ? No; according to public law, the Defense Reserve is only for mission critical applications.

23. **What is the definition of mission critical**? The definition can be found in DODI 5000.2, Part 15, page 15-11. The definition is: "A system whose operational effectiveness and operational suitability are essential to successful completion or to aggregate residual combat capability. If this system fails, the mission likely will not be completed. Such a system can be an auxiliary or supporting system, as well as a primary mission system."

24. **How will accountability for the chemicals be handled?** Accountability for the Defense Reserve will be maintained at DGSC on the National Inventory Record. Material turned in by each Service or purchased for a Service will be identified on the National Inventory Record by Service ownership code. Issues to each Service will be from that particular Services on hand quantity.

25. **What are the Service ownership codes?**

1 - Army
4 - Marine Corps
5 - Navy
6 - Air Force
7 - Coast Guard
7 - Defense Agencies

26. **Will the Service requisitioning a chemical be charged for that chemical?** If the requisition is from the Service ownership quantity in the Defense Reserve, then the billing amount will NOT include an amount for the gas or the cylinder it is in. The billing amount will only be a surcharge handling fee for storage, reclaiming and transportation. If the requisition is from the DLA ownership quantity, then the billing amount will be for the full price of the item (i.e., includes gas, cylinder, and surcharge).

27. **If an organization has excess ODSs, can they sell the chemical to a contractor in lieu of sending it to the Defense Reserve?** No; first contact your MAJCOM pollution prevention representative to determine if any other AF requirements exist. If there are no other AF requirements, then all excess Halons and refrigerants should be turned in to the Defense Reserve for future Air Force use. The price the Government would have to pay to buy the material back from the contractor would far exceed any initial profit.

28. **Will the Defense Reserve support Foreign Military Sales (FMS) ODS requirements**? No; FMS customer ODS programs will be funded and managed separately and apart from the Defense Reserve. DLA will accomplish this through

separate FMS ODS procurements. For FMS requirements contact Ed Primm, AFSAC/XMX, DSN 787-2261.