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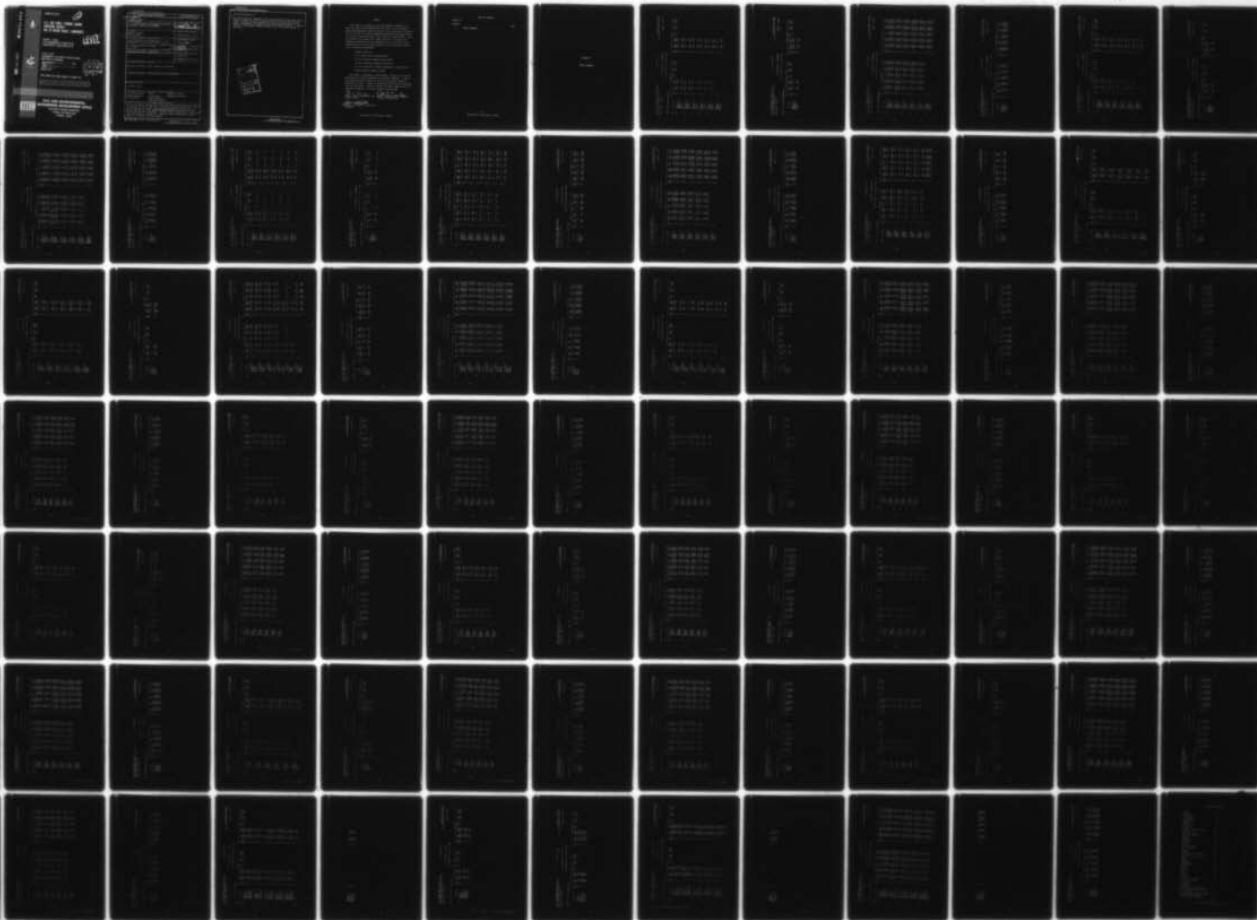
SCOTT ENVIRONMENTAL TECHNOLOGY INC PLUMSTEADVILLE PA F/G 21/5
U.S. AIR FORCE TURBINE ENGINE EMISSION SURVEY. VOLUME III. ENGI--ETC(U)
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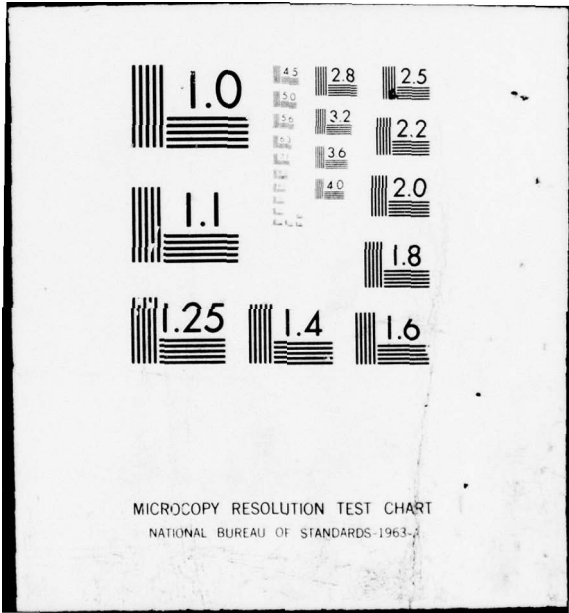
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U.S. AIR FORCE TURBINE ENGINE EMISSION SURVEY VOL III ENGINE MODEL SUMMARIES

LEVEL

ANTHONY F. SOUZA
SCOTT ENVIRONMENTAL TECHNOLOGY, INC.
PLUMSTEADVILLE, PENNSYLVANIA 18949

PETER S. DALEY
ENVIRONMENTAL ASSESSMENT RESEARCH DIVISION
DIRECTORATE OF ENVIRONICS

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AUGUST 1978

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FINAL REPORT FOR PERIOD JANUARY 1975-JUNE 1978

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DR 1 A061532
Vol 2 A061665

CEEDO

**CIVIL AND ENVIRONMENTAL
ENGINEERING DEVELOPMENT OFFICE**
(AIR FORCE SYSTEMS COMMAND)
TYNDALL AIR FORCE BASE
FLORIDA 32403

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

19 REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM	
1. REPORT NUMBER CEEDO-TR-78-34 ✓	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER	
4. TITLE (and Subtitle) U. S. AIR FORCE TURBINE ENGINE EMISSION SURVEY, VOLUME III. ENGINE MODEL SUMMARIES.		5. TYPE OF REPORT & PERIOD COVERED Final Report. Jan 1975 to Jun 1978	
7. AUTHOR(s) Anthony F. /Souza Peter S. /Daley		8. CONTRACT OR GRANT NUMBER(s) 15 USAF F29601-75-C-0046 /NEW	
9. PERFORMING ORGANIZATION NAME AND ADDRESS Scott Environmental Technology, Inc. ✓ Plumsteadville, Pennsylvania 18949		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS 63723F: 21032A10	
11. CONTROLLING OFFICE NAME AND ADDRESS Det 1 ADTC Civil and Environmental Engineering Development Office, Tyndall AFB, Florida 32403		12. REPORT DATE August 1978 19 2A	
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		13. NUMBER OF PAGES 91	
		15. SECURITY CLASS. (of this report) UNCLASSIFIED	
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE	
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.			
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)			
18. SUPPLEMENTARY NOTES Available in DDC			
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Gas Turbine Engines Smoke Oxides of Nitrogen Exhaust Emissions Particulates Afterburner Emissions Air Pollution Carbon Monoxide Total Hydrocarbons			
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The gaseous exhaust emissions from 14 military gas turbine engines were measured at various power levels from idle to full power including afterburning. SAE smoke number was determined. All measurements were made using the Air Force Mobile Emissions Laboratory which is a self-contained state-of-the-art gas turbine emissions test laboratory. Emission rates of hydrocarbons, carbon monoxide and oxides of nitrogen were calculated. The emission rate of sulfur oxides was estimated from fuel analyses.			

Continued from Block 20.

The body of data was analyzed to show relationships among the data. These studies included the effect of power setting on emission index and smoke number, variation of gas concentrations across the exhaust plume and the degree of uncertainty introduced by abbreviated sampling methods. A summary table of "Best Estimate" emission factors for all the engines tested is provided.

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PREFACE

This report was prepared by Scott Environmental Technology, Inc. under Air Force Contract Number F29601-75-C-0046. The work reported herein was administered under the direction of the Environics Directorate of the Air Force Civil and Environmental Engineering Development Office (Det 1 ADTC) with Major Peter S. Daley serving as Project Officer. Work was performed from January 1975 through June 1977. The engine test program was performed with the cooperation of the following Air Force organizations and private engine overhaulers; their excellent cooperation is gratefully acknowledged.

Teledyne; Nesho MO

First Composite Wing; Andrews AFB MD

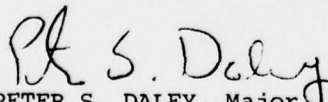
Air Force Logistics Command; Kelly AFB TX


Air Force Logistics Command; Tinker AFB OK

Air Force Tactical Air Command Headquarters; Langley AFB VA

General Electric Company; Lynn MA

This report is presented in three volumes. Volume I is an overall description of the work performed and the results obtained. A table of best estimate emission factors for Air Force gas turbine engines is presented in Volume I. Volume II contains the results of the individual tests of each engine. Volume III contains the Model Summaries which are statistical summaries of the test results by engine model.


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Project Officer


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Director of Environics

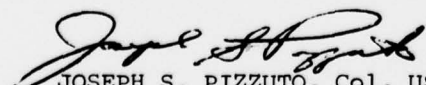

JOSEPH S. PIZZUTO, Col, USAF, BSC
Commander

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MODEL SUMMARIES

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-D04-1275

REPORT DATE 02/11/77
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : J69-T25

TEST LOCATION : TELEDYNE,NEO

ENGINE 1, PAGE 2

***** CATEGORY A TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - #/HR				SMOKE NUMBER							
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR
IDLE	1	220	220				1	32.55	32.55			
INTERMED. 1	0						0					
INTERMED. 2	0						0					
NORMAL	1	670	670				1	1.67	1.67			
MILITARY	1	1090	1090				1	3.24	3.24			

***** CATEGORY B TESTS ONLY *****

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	# / 1000# FUEL				# / HR						
			MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR
THC	IDLE	10	35.57	6.86	19.86	10.421	52.48	10	6.18	1.51	4.62	2.837	52.71
	INTERMED. 1	2	12.38	7.57	9.97	3.401	34.10	2	3.59	2.16	2.87	1.011	35.17
	INTERMED. 2	2	5.95	2.21	4.08	2.645	64.82	2	3.09	1.16	2.13	1.351	63.26
	NORMAL	10	1.87	0.59	1.29	0.497	38.60	10	1.23	0.42	0.89	0.316	35.62
CO	MILITARY	10	0.75	0.24	0.49	0.156	31.50	10	0.79	0.26	0.54	0.165	30.58
	IDLE	10	161.45	103.83	126.44	21.972	17.38	10	37.9	23.9	29.3	5.25	1.79
	INTERMED. 1	2	98.61	97.10	97.85	1.068	1.09	2	28.6	27.7	28.2	0.64	0.23
	INTERMED. 2	2	69.11	56.40	63.25	5.452	9.05	2	34.3	29.3	31.6	3.54	1.11
NOx	NORMAL	10	56.27	36.50	48.72	5.655	11.61	10	37.7	30.3	33.6	2.55	0.75
	MILITARY	10	33.39	28.25	31.02	1.601	5.16	10	36.8	30.6	34.0	1.92	0.57
	IDLE	9	1.80	1.27	1.53	0.186	12.10	9	0.41	0.29	0.36	0.042	11.86
	INTERMED. 1	2	2.12	1.98	2.05	0.099	4.83	2	0.60	0.56	0.59	0.014	2.40
NO2	INTERMED. 2	2	2.75	2.55	2.67	0.170	6.36	2	1.45	1.37	1.41	0.057	4.01
	NORMAL	9	3.31	1.67	2.68	0.334	19.96	9	2.82	1.10	1.91	0.566	29.68
	MILITARY	9	4.15	2.66	3.60	0.520	14.47	9	4.50	2.88	3.95	0.561	14.16
	IDLE	10	1.61	0.04	0.41	0.576	139.70	10	0.42	0.01	0.10	0.134	139.69
NOx	INTERMED. 1	2	0.22	0.14	0.16	0.057	31.43	2	0.06	0.04	0.05	0.014	28.28
	INTERMED. 2	2	1.12	0.96	1.04	0.113	10.88	2	0.56	0.51	0.54	0.049	9.08
	NORMAL	10	2.91	1.01	1.67	0.555	34.10	10	1.92	0.67	1.15	0.412	35.98
	MILITARY	10	3.81	2.15	2.53	0.469	17.84	10	4.04	2.34	2.87	0.485	16.86
SOx	IDLE	9	1.70	0.39	1.27	0.431	33.84	9	0.39	0.09	0.30	0.100	33.88
	INTERMED. 1	2	1.90	1.85	1.87	0.035	1.89	2	0.54	0.54	0.54	0.000	0.00
	INTERMED. 2	2	1.66	1.59	1.62	0.064	3.39	2	0.87	0.85	0.86	0.014	1.64
	NORMAL	9	1.64	0.41	1.19	0.478	40.12	9	1.35	0.28	0.85	0.380	44.46
SOx	MILITARY	9	1.57	0.31	1.10	0.552	50.19	9	1.76	0.35	1.21	0.603	50.01
	IDLE	0						10	0.48	0.16	0.33	0.140	41.65
	INTERMED. 1	0						2	0.58	0.57	0.57	0.007	1.23
	INTERMED. 2	0						2	1.07	1.04	1.05	0.021	2.01
SOx	NORMAL	0						10	1.74	0.53	1.03	0.492	47.70
	MILITARY	0						10	2.24	0.88	1.58	0.650	41.20

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-604-1275

USAF CONTRACT F29601-75-C-0046

REPORT DATE 02/11/77

ENGINE MODEL : J69-T25

TEST LOCATION : TELEDYNE,NEO

ENGINE 1, PAGE 2

***** CATEGORY B TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - #/HR				SMOKE NUMBER							
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR
IDLE	10	240	220	232	5.9	2.53	10	48.05	24.46	59.40	8.213	20.85
INTERMED. 1	2	298	285	286	3.5	1.23	2	37.56	34.16	35.86	2.404	6.70
INTERMED. 2	2	535	520	528	10.6	2.01	2	5.34	0.00	2.67	3.776	141.42
NORMAL	10	870	655	701	80.4	11.48	10	7.97	0.00	2.02	2.505	124.19
MILITARY	10	1120	1060	1096	20.3	1.86	10	11.20	0.00	2.67	3.591	134.34

ENGINE MODEL : J69-T25

TEST LOCATION : TELEDYNE MEO

ENGINE 1, PAGE 1

***** CATEGORY C TESTS ONLY *****

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	# / 1000# FUEL				STND DEV	COEF VAR	NO. OBS	# / HR			
			MAX VALUE	MIN VALUE	MEAN	STND DEV				MAX VALUE	MIN VALUE	MEAN	STND DEV
THC	IDLE	1	6.91	6.91				1	1.52	1.52			
	INTERMED. 1	0						0					
	INTERMED. 2	0						0					
	NORMAL MILITARY	1	0.50	0.50				1	0.33	0.33			
CO	IDLE	1	114.49	114.49				1	25.2	25.2			
	INTERMED. 1	0						0					
	INTERMED. 2	0						0					
	NORMAL MILITARY	1	48.31	48.31				1	31.9	31.9			
NOX	IDLE	1	1.59	1.59				1	0.35	0.35			
	INTERMED. 1	0						0					
	INTERMED. 2	0						0					
	NORMAL MILITARY	1	2.77	2.77				1	1.83	1.83			
NO	IDLE	1	0.13	0.13				1	0.03	0.03			
	INTERMED. 1	0						0					
	INTERMED. 2	0						0					
	NORMAL MILITARY	1	1.41	1.41				1	0.93	0.93			
NO2	IDLE	1	1.46	1.46				1	0.32	0.32			
	INTERMED. 1	0						0					
	INTERMED. 2	0						0					
	NORMAL MILITARY	1	2.56	2.56				1	2.82	2.82			
SOX	IDLE	1	1.31	1.31				1	0.89	0.89			
	INTERMED. 1	0						0					
	INTERMED. 2	0						0					
	NORMAL MILITARY	1	1.35	1.35				1	1.44	1.44			

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-004-1275

REPORT DATE 02/11/77
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : J69-Y25

TEST LOCATION : TELEDYNE,NEO

ENGINE 1, PAGE 2

***** CATEGORY C TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - #/HR				SMOKE NUMBER							
	NO. CAS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR
IDLE	1	220	220				1	49.50	49.50			
INTERMED. 1	0						0					
INTERMED. 2	0						0					
NORMAL	1	660	660				1	0.00	0.00			
MILITARY	1	1100	1100				1	0.00	0.00			

***** CATEGORY A TESTS ONLY *****

PAPAM	TEST MODE	NO. OBS	# / 1000# FUEL			# / HR		
			MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR	STND DEV
THC	IDLE	1	31.05	31.05		13.97	13.97	
	INTERMED. 1	0						
	INTERMED. 2	0						
	NORMAL MILITARY	1	3.74	3.74		5.27	5.27	
CO	IDLE	1	172.93	172.93		77.8	77.8	
	INTERMED. 1	0						
	INTERMED. 2	0						
	NORMAL MILITARY	1	41.30	41.30		58.2	58.2	
NOX	IDLE	1	1.29	1.29		0.58	0.58	
	INTERMED. 1	0						
	INTERMED. 2	0						
	NORMAL MILITARY	1	2.35	2.35		3.32	3.32	
NO	IDLE	1	0.17	0.17		0.08	0.08	
	INTERMED. 1	0						
	INTERMED. 2	0						
	NORMAL MILITARY	1	0.68	0.68		0.96	0.96	
NO2	IDLE	1	1.51	1.51		4.12	4.12	
	INTERMED. 1	0						
	INTERMED. 2	0						
	NORMAL MILITARY	1	1.67	1.67		2.36	2.36	
SOX	IDLE	1	1.02	1.02		0.36	0.36	
	INTERMED. 1	0						
	INTERMED. 2	0						
	NORMAL MILITARY	1	1.13	1.13		1.13	1.13	

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-004-1275

REPORT DATE 02/11/77
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : J85-5

TEST LOCATION : TELEDYNE,NEO

ENGINE 2, PAGE 2

***** CATEGORY A TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - #/HR				SMOKE NUMBER							
	NO. CBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR	NO. CBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR
IDLE	1	450	450				1	0.00	0.00			
INTERMED. 1	0						0					
INTERMED. 2	0						0					
NORMAL	1	1410	1410				1	0.00	0.00			
MILITARY	1	2720	2720				1	3.58	3.58			

***** CATEGORY 6 TESTS ONLY *****

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	# / 1000# FUEL				STND DEV	COEF VAR	NO. OBS	# / HR				STND DEV	COEF VAR
			MAX VALUE	MIN VALUE	MEAN	STND DEV				MAX VALUE	MIN VALUE	MEAN	STND DEV		
THC	IDLE	9	49.48	23.53	29.78	8.154	27.38	9	22.27	10.59	13.49	0.628	26.90		
	INTERMED. 1	2	20.56	18.82	19.69	1.230	6.25	2	12.13	11.10	11.61	0.728	6.27		
	INTERMED. 2	2	7.04	4.63	5.83	1.704	29.21	2	3.16	5.23	6.69	2.072	30.95		
	NORMAL	9	5.32	1.53	5.33	1.221	36.62	9	7.87	2.09	4.93	1.896	38.44		
	MILITARY	9	1.27	0.44	0.84	0.269	31.96	9	3.35	1.11	2.20	0.721	32.71		
CO	MAX AB	3	0.12	0.01	0.07	0.057	77.54	3	1.01	0.10	0.61	0.464	76.44		
	IDLE	9	209.35	166.98	180.30	10.973	6.09	9	92.0	74.0	81.7	5.03	0.62		
	INTERMED. 1	2	133.10	130.23	131.66	2.029	1.54	2	78.5	76.6	77.6	1.20	0.15		
	INTERMED. 2	2	56.71	53.57	55.14	2.220	4.03	2	65.8	60.5	63.2	3.75	0.59		
	NORMAL	9	48.58	39.72	43.57	2.766	6.35	9	71.9	56.4	64.0	5.45	0.85		
VCK	MILITARY	9	33.48	27.00	29.47	2.256	7.66	9	90.1	68.6	77.3	7.31	0.95		
	MAX AB	3	27.24	23.81	26.04	1.930	7.41	3	228.1	198.1	216.7	16.24	0.75		
	IDLE	9	1.39	1.17	1.26	0.072	5.66	9	0.62	0.53	0.57	0.029	5.00		
	INTERMED. 1	2	1.55	1.43	1.49	0.095	5.65	2	0.91	0.85	0.86	0.042	4.82		
	INTERMED. 2	2	2.10	1.77	1.93	0.233	12.06	2	2.44	2.00	2.22	0.311	14.01		
NO	NORMAL	9	3.14	1.96	2.32	0.354	15.27	9	4.62	2.75	3.40	0.522	15.34		
	MILITARY	9	3.71	2.38	2.70	0.416	15.40	9	9.99	6.12	7.08	1.139	16.09		
	MAX AB	3	2.15	1.87	1.99	0.143	7.17	3	18.09	15.34	16.59	1.393	8.40		
	IDLE	9	0.89	0.11	0.57	0.236	63.79	9	0.40	0.05	0.17	0.107	63.92		
	INTERMED. 1	2	0.45	0.09	0.27	0.255	94.26	2	0.27	0.05	0.16	0.156	97.23		
NO _x	INTERMED. 2	2	0.58	0.29	0.43	0.205	47.14	2	0.67	0.33	0.50	0.240	48.08		
	NORMAL	9	1.55	0.72	0.97	0.303	21.35	9	2.20	1.06	1.42	0.420	29.69		
	MILITARY	9	2.01	0.55	1.53	0.416	27.17	9	5.10	1.45	4.00	1.062	26.51		
	MAX AB	3	1.35	1.28	1.32	0.038	2.86	3	11.41	10.53	11.04	0.456	4.15		
	IDLE	9	1.06	0.50	0.89	0.175	19.57	9	0.49	0.22	0.40	0.081	20.10		
SO _x	INTERMED. 1	2	1.35	1.10	1.22	0.177	14.43	2	0.80	0.65	0.72	0.106	14.63		
	INTERMED. 2	2	1.52	1.48	1.50	0.028	1.89	2	1.77	1.68	1.72	0.064	3.69		
	NORMAL	9	2.41	0.69	1.35	0.477	35.18	9	3.55	1.00	1.99	0.709	35.60		
	MILITARY	9	2.24	0.61	1.17	0.553	47.28	9	6.02	1.87	3.07	1.491	48.51		
	MAX AB	3	0.75	0.58	0.66	0.117	16.61	3	6.08	4.61	5.54	0.598	18.01		
SO ₂	IDLE	0						9	0.90	0.35	0.42	0.179	42.26		
	INTERMED. 1	0						2	0.47	0.47	0.47	0.000	0.00		
	INTERMED. 2	0						2	0.93	0.90	0.91	0.021	2.32		
	NORMAL	0						9	2.94	1.09	1.37	0.592	4.33		
MILITARY		0						9	5.37	1.59	2.45	1.090	44.73		
		0						9							

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7 SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-DD4-1275

REPORT DATE 02/11/77
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : J85-5

TEST LOCATION : TELEDYNE,NEO

ENGINE 2, PAGE 2

***** CATEGORY B TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	NO. OBS	MEAS. FUEL FLOW - R/HR			STND DEV	% COEF VAR	NO. OBS	SMOKE NUMBER			STND DEV	% COEF VAR
		MAX VALUE	MIN VALUE	MEAN				MAX VALUE	MIN VALUE	MEAN		
IDLE	9	460	440	453	7.1	1.56	9	3.10	0.00	0.46	1.048	227.84
INTERMED. 1	2	590	570	590	0.0	0.00	2	0.00	0.00	0.00	0.000	0.00
INTERMED. 2	2	1160	1130	1145	21.2	1.85	2	1.04	0.52	0.78	0.368	47.14
NORMAL	9	1570	1370	1466	63.4	4.32	9	5.58	0.00	1.62	1.900	117.51
MILITARY	9	2770	2470	2620	82.8	3.16	9	7.37	0.50	2.79	1.957	70.25
MAX A3	3	3430	3220	3323	105.0	1.26	2	8.70	1.75	5.22	4.914	94.06

***** CATEGORY C TESTS ONLY *****

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	# / 1000# FUEL			# / HR			STND DEV	% COEF VAR	STND DEV	% COEF VAR
			MAX VALUE	MIN VALUE	MEAN	MAX VALUE	MIN VALUE	MEAN				
THC	IDLE	1	29.74	29.74		13.38	13.38					
	INTERMED. 1	0										
	INTERMED. 2	0										
CO	NORMAL	1	3.24	3.24		4.70	4.70					
	MILITARY	2	0.83	0.58	0.70	2.18	1.54	1.86	0.453	24.33		
	INTERMED. 1	1	182.55	182.55		82.1	82.1					
NOX	INTERMED. 2	0										
	NORMAL	1	41.97	41.97		60.9	60.9					
	MILITARY	2	27.37	27.19	27.26	72.3	71.6	72.1	0.35	0.05		
NO	IDLE	1	1.16	1.16		0.52	0.52					
	INTERMED. 1	0										
	INTERMED. 2	0										
NO2	NORMAL	1	2.09	2.09		3.02	3.02					
	MILITARY	2	2.46	2.42	2.44	6.51	6.39	6.45	0.085	1.32		
	INTERMED. 1	1	0.13	0.13		0.06	0.06					
NOx	INTERMED. 2	0										
	NORMAL	1	1.53	1.53		2.22	2.22					
	MILITARY	2	1.59	1.50	1.54	4.20	3.97	4.06	0.163	3.98		
SOx	IDLE	1	1.03	1.03		0.46	0.46					
	INTERMED. 1	0										
	INTERMED. 2	0										
SO2	NORMAL	1	0.55	0.55		0.80	0.80					
	MILITARY	2	0.92	0.87	0.89	2.42	2.30	2.36	0.085	3.60		
	INTERMED. 1	0										
SO2	INTERMED. 2	0										
	NORMAL	0										
	MILITARY	0										
SO2	INTERMED. 1	0										
	INTERMED. 2	0										
	NORMAL	0										
SO2	MILITARY	0										
	INTERMED. 1	0										
	INTERMED. 2	0										
SO2	NORMAL	0										
	MILITARY	0										
	INTERMED. 1	0										
SO2	INTERMED. 2	0										
	NORMAL	0										
	MILITARY	0										

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-DD4-1275

REPORT DATE 02/11/77
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : J65-5

TEST LOCATION : TELEDYNE-NEG

ENGINE 2, PAGE 2

***** CATEGORY C TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW ~ #/HR				SMOKE NUMBER							
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR
IDLE	1	450	450				1	0.00	0.00			
INTERMED. 1	0						0					
INTERMED. 2	1	1450	1450				1	0.00	0.00			
NORMAL	2	2640	2640	2640	0.0	0.00	2	2.50	0.00	1.25	1.708	141.42
MILITARY												

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-005-1275

REPORT DATE 02/11/77
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : J60-P3 & P58

TEST LOCATION : ANDREWS AFB

ENGINE 3, PAGE 1

***** CATEGORY A TESTS ONLY *****

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	# / 1000# FUEL			# / HR			STND DEV	COEF VAR	STND DEV	COEF VAR
			MAX VALUE	MIN VALUE	MEAN	MAX VALUE	MIN VALUE	MEAN				
THC	IDLE	2	8.86	7.37	8.11	1.054	12.98	4.34	3.10	3.72	0.877	23.57
	INTERMED. 1	0										
	INTERMED. 2	0										
CO	NORMAL	2	0.25	0.13	0.19	0.085	44.66	0.43	0.27	0.35	0.113	32.32
	MILITARY	2	0.23	0.10	0.16	0.092	55.71	0.49	0.26	0.37	0.163	43.37
	IDLE	2	73.10	63.16	68.13	7.029	10.32	35.6	26.5	31.2	6.58	2.11
NOX	INTERMED. 1	0										
	INTERMED. 2	0										
	NORMAL	2	5.93	5.78	5.85	0.106	1.81	11.7	10.4	11.0	0.92	0.83
NO	MILITARY	2	4.32	3.94	4.13	0.269	6.51	10.1	9.2	9.6	0.64	0.66
	IDLE	2	1.48	1.48	1.48	0.000	0.00	0.72	0.62	0.67	0.071	10.55
	INTERMED. 1	0										
SO _x	INTERMED. 2	0										
	NORMAL	2	4.07	3.73	3.90	0.240	6.16	8.25	6.53	7.39	1.216	16.46
	MILITARY	2	4.77	4.24	4.50	0.175	8.32	12.28	9.01	10.64	2.312	21.72
SO ₂	IDLE	2	0.16	0.11	0.13	0.035	26.19	0.07	0.05	0.06	0.014	23.57
	INTERMED. 1	0										
	INTERMED. 2	0										
SO ₃	NORMAL	2	3.31	3.14	3.22	0.120	3.73	6.71	5.50	6.10	0.856	14.31
	MILITARY	2	3.40	3.67	3.78	0.163	4.30	10.03	7.80	8.91	1.577	17.64
	IDLE	2	1.57	1.33	1.35	0.028	2.10	0.67	0.56	0.61	0.078	12.65
SO ₄	INTERMED. 1	0										
	INTERMED. 2	0										
	NORMAL	2	0.76	0.59	0.67	0.120	17.81	1.54	1.03	1.26	0.361	28.06
SO ₂₊₃	MILITARY	2	0.67	0.57	0.72	0.212	29.46	2.25	1.22	1.73	0.728	41.98
	IDLE	2	0.29	0.25	0.27	0.028	10.46	0.67	0.25	0.27	0.028	10.46
	INTERMED. 1	0										
SO ₂₊₃	INTERMED. 2	0										
	NORMAL	2	1.21	1.05	1.13	0.113	10.01	1.21	1.05	1.13	0.113	10.01
	MILITARY	2	1.54	1.27	1.40	0.191	13.59	1.54	1.27	1.40	0.191	13.59

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-005-1275

REPORT DATE 02/11/77
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : J60-PG & PSB

TEST LOCATION : ANDREWS AFB

ENGINE 3, PAGE 2

***** CATEGORY A TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - #/HR				SMOKE NUMBER							
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR
ICE	2	590	420	455	95.5	10.88	2	1.83	0.25	1.04	1.117	107.43
INTERMED. 1	0						0					
INTERMED. 2	0						0					
NORMAL	2	2025	1750	1888	194.5	10.30	2	20.17	17.25	18.71	2.065	11.04
MILITARY	2	2575	2125	2350	318.2	13.54	2	22.50	17.75	20.13	3.359	16.69

***** CATEGORY B TESTS ONLY *****

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	MAX VALUE	* / 1000# FUEL			STND DEV	% COEF VAR	NO. OBS	MAX VALUE	* / MR			STND DEV	% COEF VAR
				MIN VALUE	MEAN	STND DEV					MIN VALUE	MEAN	STND DEV		
TMC	IDLE	8	15.21	6.02	10.29	3.904	37.94	8	6.92	2.77	4.72	1.749	37.04		
	INTERMED. 1	7	1.31	0.43	0.71	0.315	44.16	7	1.34	0.40	0.70	0.322	45.82		
	INTERMED. 2	7	0.48	0.16	0.32	0.099	31.15	7	0.64	0.21	0.45	0.137	30.42		
	NORMAL	8	0.29	0.05	0.12	0.078	64.71	8	0.53	0.09	0.24	0.146	59.39		
CC	MILITARY	8	0.18	0.03	0.07	0.058	78.04	8	0.41	0.09	0.18	0.129	69.46		
	IDLE	8	82.02	63.24	71.60	6.876	9.60	8	37.7	29.5	32.9	3.13	0.95		
	INTERMED. 1	7	30.22	21.95	24.80	2.910	11.73	7	31.0	20.6	24.4	3.81	1.56		
	INTERMED. 2	7	16.33	13.33	14.80	0.980	6.62	7	23.9	17.7	21.1	2.40	1.14		
MGX	NORMAL	8	6.63	5.23	5.69	0.845	7.82	8	12.6	9.7	11.6	1.02	0.88		
	MILITARY	8	4.46	3.58	3.81	0.306	8.01	8	10.2	8.3	9.4	0.61	0.65		
	IDLE	8	1.68	1.06	1.49	0.204	13.68	8	0.80	0.49	0.69	0.099	14.46		
	INTERMED. 1	7	2.64	2.10	2.36	0.170	7.21	7	2.70	2.12	2.32	0.209	9.03		
NG	INTERMED. 2	7	3.33	2.77	3.09	0.182	5.90	7	5.17	3.93	4.40	0.409	9.31		
	NORMAL	8	4.14	3.68	4.10	0.224	5.46	8	9.16	6.98	8.38	0.718	8.57		
	MILITARY	8	5.05	4.20	4.76	0.300	6.29	8	12.73	9.45	11.83	1.077	9.10		
	IDLE	8	1.47	0.87	0.39	0.473	122.05	8	0.71	0.03	0.18	0.229	125.42		
NGZ	INTERMED. 1	7	2.31	1.18	1.73	0.343	19.75	7	2.37	1.21	1.70	0.376	22.06		
	INTERMED. 2	7	3.03	2.13	2.53	0.281	11.13	7	4.69	3.09	3.61	0.551	15.28		
	NORMAL	8	3.78	3.13	3.56	0.214	6.01	8	7.96	5.94	7.29	0.660	9.05		
	MILITARY	8	4.52	3.07	4.21	0.251	5.95	8	11.42	8.26	10.47	1.015	9.69		
SOX	IDLE	8	1.53	0.19	1.10	0.433	39.33	8	0.68	0.09	0.50	0.197	38.93		
	INTERMED. 1	7	0.92	0.32	0.63	0.191	30.37	7	0.94	0.33	0.61	0.184	29.99		
	INTERMED. 2	7	0.68	0.31	0.56	0.132	23.55	7	0.95	0.46	0.79	0.168	21.24		
	NORMAL	8	0.76	0.32	0.53	0.154	28.71	8	1.59	0.67	1.09	0.328	30.17		
SOY	MILITARY	8	0.81	0.30	0.55	0.191	34.66	8	1.99	0.76	1.36	0.460	33.82		
	IDLE	8	0.29	0.26	0.28	0.010	3.73	8	0.29	0.26	0.28	0.010	3.73		
	INTERMED. 1	7	0.61	0.54	0.59	0.030	5.11	7	0.61	0.54	0.59	0.030	5.11		
	INTERMED. 2	7	0.93	0.79	0.85	0.051	6.04	7	0.93	0.79	0.85	0.051	6.04		
SUX	NORMAL	8	1.30	1.09	1.22	0.074	6.04	8	1.30	1.09	1.22	0.074	6.04		
	MILITARY	8	1.62	1.35	1.49	0.089	6.01	8	1.62	1.35	1.49	0.089	6.01		

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-005-1275

REPORT DATE 02/11/77
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : J61-P8 & P8H

TEST LOCATION : ANDREWS AFB

ENGINE 3, PAGE 2

***** CATEGORY B TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - #/HR				SMOKE NUMBER							
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR
IDLE	4	480	440	460	14.4	3.13	6	4.00	0.67	1.93	1.088	56.46
INTERMED. 1	7	1025	900	981	50.2	5.12	7	10.50	3.50	6.71	3.033	45.17
INTERMED. 2	7	1550	1320	1423	81.1	5.70	7	18.75	9.75	13.82	3.115	22.54
NORMAL	8	2175	1825	2045	123.3	6.03	8	22.00	11.75	17.04	3.796	22.28
MILITARY	8	2710	2250	2483	152.5	6.15	8	22.50	10.50	17.41	4.412	25.35

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF TURBINE ENGINE EMISSIONS INVENTORY
ENGINE MODEL SUMMARY REPORT

SET 1492-005-1275

USAF CONTRACT F29601-75-C-0046
REPORT DATE 02/11/77

ENGINE MODEL : J60-F8 L P58

TEST LOCATION : ANDREWS AFB

ENGINE 3, PAGE 1

***** CATEGORY C TESTS ONLY *****

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	* / 1000# FUEL				* / HR						
			MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR
THC	IDLE	2	5.73	6.73	6.73	0.000	0.00						
	INTERMED. 1	0											
	INTERMED. 2	0											
	NORMAL	2	0.10	0.05	0.07	0.035	47.14						
CO	MILITARY	2	0.06	0.06	0.06	0.000	0.00						
	IDLE	2	65.79	63.99	64.89	1.273	1.96						
	INTERMED. 1	0											
	INTERMED. 2	0											
NOx	NORMAL	2	6.38	5.33	5.85	0.742	12.68						
	MILITARY	2	4.19	3.23	3.71	0.679	18.30						
	IDLE	2	1.59	1.50	1.54	0.064	4.12						
	INTERMED. 1	0											
NO	INTERMED. 2	0											
	NORMAL	2	4.29	3.62	3.95	0.474	11.98						
	MILITARY	2	5.10	4.14	4.62	0.679	14.69						
	IDLE	2	0.18	0.15	0.16	0.021	12.86						
NO2	INTERMED. 1	0											
	INTERMED. 2	0											
	NORMAL	2	3.52	3.08	3.30	0.311	9.43						
	MILITARY	2	4.23	3.60	3.91	0.445	11.38						
SOx	IDLE	2	1.44	1.32	1.38	0.085	6.15						
	INTERMED. 1	0											
	INTERMED. 2	0											
	NORMAL	2	0.77	0.59	0.65	0.163	24.83						
SO2	MILITARY	2	0.88	0.55	0.71	0.233	32.54						
	IDLE	0											
	INTERMED. 1	0											
	INTERMED. 2	0											
SO3	NORMAL	2	0.84	0.79	0.81	0.035	4.34						
	MILITARY	2	1.26	1.14	1.20	0.085	7.07						
	IDLE	2	1.47	1.35	1.41	0.085	6.02						
	INTERMED. 1	0											

REPORT DATE 02/11/77
 USAF CONTRACT F29601-75-C-0046

SET 1492-005-1275

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

ENGINE 3, PAGE 2

TEST LOCATION : ANDREWS AFB

ENGINE MODEL : J60-P0 & P5H

***** CATEGORY C TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - #/HR					SMOKE NUMBER						
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR
IDLE	2	480	445	463	24.7	5.35	2	3.25	1.50	2.36	1.237	52.10
INTERMED. 1	2	975	925	950	35.4	3.72	0					
INTERMED. 2	2	1405	1320	1363	60.1	4.41	0					
NORMAL	2	2100	1900	2000	141.4	7.07	2	20.50	20.25	20.38	0.177	0.87
MILITARY	2	2450	2250	2350	141.4	6.02	2	22.25	22.25	22.25	0.000	0.00

ENGINE MODEL : J79-15

TEST LOCATION : KELLY AFB

ENGINE : PAGE 1

***** CATEGORY A TESTS ONLY *****

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	# / 1000# FUEL				# / HR					
			MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV
HC	IDLE	1	14.39	14.39			15.98	15.98				
	INTERMED. 1	0										
	INTERMED. 2	0										
	NORMAL	1	0.26	0.26			1.33	1.33				
CO	MILITARY	1	0.19	0.19			1.69	1.69				
	MAX AS	1	1.84	1.84			60.56	60.56				
	IDLE	1	58.28	58.28			64.7	64.7				
	INTERMED. 1	0										
NOx	INTERMED. 2	0										
	NORMAL	1	4.69	4.68			24.3	24.3				
	MILITARY	1	2.16	2.16			19.2	19.2				
	MAX AS	1	71.33	71.33			2344.3	2344.3				
NO ₂	IDLE	1	2.50	2.50			2.78	2.78				
	INTERMED. 1	0										
	INTERMED. 2	0										
	NORMAL	1	5.47	5.47			28.42	28.42				
NO	MILITARY	1	8.73	8.73			77.83	77.83				
	MAX AS	1	3.10	3.10			101.86	101.86				
	IDLE	1	1.04	1.04			1.16	1.16				
	INTERMED. 1	0										
NO ₂	INTERMED. 2	0										
	NORMAL	1	4.98	4.98			25.92	25.92				
	MILITARY	1	7.96	7.96			70.88	70.88				
	MAX AS	1	2.18	2.18			71.74	71.74				
SOx	IDLE	1	1.46	1.46			1.62	1.62				
	INTERMED. 1	0										
	INTERMED. 2	0										
	NORMAL	1	0.48	0.48			2.50	2.50				
SO ₂	MILITARY	1	0.78	0.78			6.94	6.94				
	MAX AS	1	0.92	0.92			30.12	30.12				
	IDLE	0					0.67	0.67				
	INTERMED. 1	0										
SO ₃	INTERMED. 2	0										
	NORMAL	0										
	MILITARY	0										
	MAX AS	0										

REPORT DATE 02/11/77
 USAF CONTRACT F29601-75-C-0040
 ENGINE 4, PAGE 2

SET 1492-06 -275D
 TEST LOCATION : KELLY AFB

FSCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT
 ENGINE MODEL : J79-15

***** CATEGORY A TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - #/HR				SMOKE NUMBER							
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR
IDLE	1	1110	1110				1	21.42	21.42			
INTERMED. 1	0						0					
INTERMED. 2	1	5200	5200				1	57.62	57.62			
NORMAL	1	8910	8910				1	58.42	58.42			
MILITARY	1	32854	32854				1	24.48	24.48			
MAX AB	1						1					

ENGINE MODE : J77-15

TEST LOCATION : KELLY AFB

ENGINE 4, PAGE 1

***** CATEGORY B TESTS ONLY *****

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	* / 1000# FUEL			* / HR			STND DEV	% COEF VAR
			MAX VALUE	MIN VALUE	MEAN	STND DEV	MEAN	STND DEV		
THC	IDLE	5	12.42	5.68	9.99	2.767	27.69	11.36	3.214	28.29
	INTERMED. 1	5	5.75	1.58	3.29	1.660	50.44	5.04	2.697	53.47
	INTERMED. 2	5	0.84	0.08	0.28	0.319	113.87	2.06	2.332	112.97
	NORMAL	5	1.51	0.19	0.50	0.567	112.89	2.75	3.188	116.11
	MILITARY	5	0.68	0.06	0.23	0.259	111.55	2.06	2.311	112.09
MAX AB	5	14.18	0.79	6.18	4.963	80.25	185.26	67.782	90.57	
CO	IDLE	5	65.11	53.37	59.43	5.054	8.96	64.0	5.42	0.85
	INTERMED. 1	5	32.58	19.28	25.98	4.857	18.70	39.5	8.30	2.10
	INTERMED. 2	5	3.94	2.62	3.11	0.554	17.80	23.0	3.74	1.62
	NORMAL	5	5.37	3.98	4.49	0.588	13.10	24.2	3.00	1.24
	MILITARY	5	2.77	1.90	2.30	0.400	17.40	17.1	3.58	1.74
MAX AB	5	69.39	38.46	50.77	11.312	22.19	1487.5	539.88	3.63	
NOX	IDLE	3	2.54	2.41	2.46	0.068	2.76	2.71	0.102	3.67
	INTERMED. 1	3	3.31	3.02	3.16	0.145	4.60	4.83	0.386	7.98
	INTERMED. 2	5	8.51	5.62	6.94	1.045	15.29	50.67	7.379	14.56
	NORMAL	5	6.55	4.70	5.75	0.801	13.94	30.96	3.778	12.21
	MILITARY	5	11.30	7.57	9.48	1.364	15.19	80.20	12.536	15.63
MAX AB	5	4.60	2.89	3.41	0.713	20.91	95.20	13.410	14.09	
NO	IDLE	5	1.58	0.73	1.09	0.336	30.87	1.23	0.368	29.86
	INTERMED. 1	5	2.27	1.41	2.01	0.345	17.17	3.06	0.554	18.28
	INTERMED. 2	5	7.76	4.79	6.13	1.054	17.29	45.42	7.547	16.62
	NORMAL	5	5.95	4.00	4.74	0.654	14.05	26.59	3.140	11.81
	MILITARY	5	10.43	6.55	8.12	1.413	17.40	72.53	12.948	17.85
MAX AB	5	2.00	1.66	1.79	0.145	8.10	52.10	14.308	27.46	
NO2	IDLE	3	1.39	0.44	1.17	0.291	24.87	1.32	0.236	25.49
	INTERMED. 1	3	1.11	0.64	1.00	0.140	14.06	1.53	0.272	17.77
	INTERMED. 2	5	0.83	0.49	0.71	0.126	18.15	5.26	0.907	17.25
	NORMAL	5	0.94	0.44	0.67	0.144	21.64	3.59	0.807	22.48
	MILITARY	5	1.11	0.53	0.86	0.170	19.80	7.68	1.500	19.54
MAX AB	5	2.91	1.14	1.62	0.736	45.33	43.10	5.749	13.34	
SOX	IDLE	0								
	INTERMED. 1	0								
	INTERMED. 2	0								
	NORMAL	0								
	MILITARY	0								
MAX AB	0									

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Z SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

ENGINE 4, PAGE 2

TEST LOCATION : KELLY AFB

ENGINE MODEL : J79-15

***** CATEGORY B TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - R/HR					SMOKE NUMBER						
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR
IDLE	5	1150	1125	1135	15.4	1.36	5	23.82	15.65	21.22	3.610	17.01
INTERMED. 1	5	1590	1455	1518	53.5	3.55	5	43.13	26.63	38.60	6.980	18.08
INTERMED. 2	5	7570	7270	7416	125.7	1.99	5	64.25	57.90	61.70	2.946	4.77
NORMAL	5	5565	5215	5397	146.7	2.72	5	62.75	55.75	59.63	3.288	5.51
MILITARY	5	8980	8630	8923	65.5	0.73	5	61.75	59.86	60.71	0.810	1.33
MAX AB	5	32924	16658	28997	6924.0	23.86	5	51.50	29.88	40.03	7.953	19.87

***** CATEGORY C TESTS ONLY *****

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	# / 1000# FUEL				# / HR					
			MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV
THC	IDLE	1	11.54	11.54			12.98	12.98				
	INTERMED. 1	0										
	INTERMED. 2	0										
	NORMAL MILITARY MAX A3	1	0.22	0.15	0.15	0.36	1.18	1.34	11.62	55.4	20.3	17.2
CO	IDLE	1	49.25	49.25			55.4	55.4				
	INTERMED. 1	0										
	INTERMED. 2	0										
	NORMAL MILITARY MAX A3	1	3.83	1.91	3.83	34.10	20.3	17.2	1095.0	2.46	2.46	
NOX	IDLE	1	2.18	2.18			2.46	2.46				
	INTERMED. 1	0										
	INTERMED. 2	0										
	NORMAL MILITARY MAX A3	1	5.16	5.16	8.36	2.86	27.36	75.05	91.75	1.01	1.01	
NO2	IDLE	1	0.90	0.90			1.01	1.01				
	INTERMED. 1	0										
	INTERMED. 2	0										
	NORMAL MILITARY MAX A3	1	9.70	7.65	4.70	2.05	24.90	68.69	67.20	1.45	1.45	
SOX	IDLE	1	1.29	1.29			1.45	1.45				
	INTERMED. 1	0										
	INTERMED. 2	0										
	NORMAL MILITARY MAX A3	1	0.46	0.71	0.46	0.76	2.46	6.36	24.55	0.45	0.45	

7 SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

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ENGINE MODEL : J77-15

TEST LOCATION : KELLY AFB

ENGINE 4, PAGE 2

***** CATEGORY C TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - R/HR		MEAN		STND DEV		COEF VAR		NO. OBS	SMOKE NUMBER		STND DEV		COEF VAR			
	MAX VALUE	MIN VALUE	MEAN	STND DEV	MEAN	STND DEV	MAX VALUE	MIN VALUE		MEAN	STND DEV	MAX VALUE	MIN VALUE	MEAN	STND DEV	MAX VALUE	MIN VALUE
IDLE	1125	1125							1	25.88	25.88						
INTERMED. 1									0								
INTERMED. 2									0								
NORMAL	5300	5300							1	65.00	65.00						
MILITARY	8980	8980							1	62.63	62.63						
MAX AS	32113	32113							1	4.75	4.75						

***** CATEGORY A TESTS ONLY *****

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	R / 1000R FUEL			R / HR			STND DEV	STND DEV	COEF VAR	STND DEV	COEF VAR
			MAX VALUE	MIN VALUE	MEAN	STND DEV	STND DEV	MEAN					
F-C	LO GRND-IDLE	2	23.34	17.21	20.27	4.335	21.38	13.30	10.07	11.68	2.284	19.55	
	HI GRND-IDLE	2	10.70	1.50	6.10	6.505	106.65	7.44	1.06	4.26	4.497	105.57	
	APPROACH	0											
C-V	CRUISE	0											
	NORMAL	2	5.37	0.55	2.96	3.408	115.14	10.21	0.98	5.59	6.527	116.65	
	MILITARY	2	4.27	0.34	2.30	2.779	120.56	8.58	0.64	4.61	5.614	121.79	
L-V	LO GRND-IDLE	2	33.26	30.69	31.97	1.817	5.68	19.0	18.0	18.5	0.71	0.38	
	HI GRND-IDLE	2	8.62	7.71	8.16	0.643	7.88	6.0	5.5	5.8	0.35	0.61	
	APPROACH	0											
N-CX	CRUISE	0											
	NORMAL	2	2.57	2.48	2.52	0.064	2.52	4.9	4.4	4.6	0.35	0.76	
	MILITARY	2	2.22	2.15	2.18	0.049	2.27	4.5	4.1	4.3	0.28	0.66	
N-CY	LO GRND-IDLE	2	3.48	2.71	3.09	0.544	17.59	2.04	1.55	1.79	0.346	19.30	
	HI GRND-IDLE	2	6.68	6.67	6.67	0.007	0.11	4.81	4.64	4.72	0.120	2.54	
	APPROACH	0											
N-CZ	CRUISE	0											
	NORMAL	2	9.58	9.98	9.77	0.410	4.92	18.17	15.03	17.10	1.513	8.85	
	MILITARY	2	9.57	9.19	9.38	0.269	2.86	19.24	17.41	18.32	1.294	7.06	
N-D	LO GRND-IDLE	2	1.34	1.26	1.30	0.057	4.35	0.76	0.74	0.75	0.014	1.84	
	HI GRND-IDLE	1	5.88	5.28				4.23	4.23				
	APPROACH	0											
N-E	CRUISE	0											
	NORMAL	1	6.34	8.34				14.88	14.88				
	MILITARY	1	8.39	8.39				15.91	15.91				
N-F	LO GRND-IDLE	2	2.22	1.38	1.80	0.594	33.00	1.30	0.79	1.04	0.361	34.51	
	HI GRND-IDLE	1	0.80	0.80				0.58	0.58				
	APPROACH	0											
N-G	CRUISE	0											
	NORMAL	1	0.65	0.65				1.15	1.15				
	MILITARY	1	0.80	0.80				1.51	1.51				
N-H	LO GRND-IDLE	0											
	HI GRND-IDLE	0						0.23	0.23	0.23	0.000	0.00	
	APPROACH	0						0.29	0.28	0.26	0.007	2.48	
N-I	CRUISE	0											
	NORMAL	0						0.76	0.71	0.73	0.035	4.81	
	MILITARY	0						0.80	0.76	0.78	0.028	3.63	

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7 SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

ENGINE 5, PAGE 2

TEST LOCATION : KELLY AFB

ENGINE MODEL : 156-A7B

***** CATEGORY A TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - #/HR		STND DEV		% COEF VAR		NO. OBS		MAX VALUE		MIN VALUE		MEAN		STND DEV		% COEF VAR		NO. OBS		MAX VALUE		MIN VALUE		MEAN		STND DEV		% COEF VAR	
LO BRND-IDLE	2	585	570	578	10.6	1.84	2	23.58	23.25	23.41	0.233	1.00	2	23.58	23.25	23.41	0.233	1.00	2	23.58	23.25	23.41	0.233	1.00	2	23.58	23.25	23.41	0.233	1.00
HI BRND-IDLE	2	720	695	708	17.7	2.50	2	30.09	30.06	30.04	0.607	0.02	2	30.09	30.06	30.04	0.607	0.02	2	30.09	30.06	30.04	0.607	0.02	2	30.09	30.06	30.04	0.607	0.02
APPROACH	0						0						0						0						0					
CRUISE	2	1900	1785	1843	81.3	4.41	2	36.42	36.08	36.25	0.240	0.66	2	36.42	36.08	36.25	0.240	0.66	2	36.42	36.08	36.25	0.240	0.66	2	36.42	36.08	36.25	0.240	0.66
NORMAL	2	2310	1895	1953	81.3	4.16	2	37.25	35.58	35.41	1.181	3.24	2	37.25	35.58	35.41	1.181	3.24	2	37.25	35.58	35.41	1.181	3.24	2	37.25	35.58	35.41	1.181	3.24
MILITARY	2						2						2						2						2					

ENGINE MODEL : F50-A74

TEST LOCATION : KELLY AFB

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***** CATEGORY B TESTS ONLY *****

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	# / 1000# FUEL				# / HR				% COEF VAR	STND DEV	% COLF VAR
			MAX VALUE	MIN VALUE	MEAN	STND DEV	MAX VALUE	MIN VALUE	MEAN	STND DEV			
HC	LO GRND-IDLE	7	25.31	16.40	21.20	3.497	16.50	14.67	10.17	12.65	2.073	16.39	
	HI GRND-IDLE	7	13.64	1.51	7.06	4.543	64.35	9.76	1.14	5.12	3.200	62.53	
	APPROACH	7	8.48	0.63	4.80	3.180	66.23	6.78	0.54	3.94	2.566	65.11	
	CRUISE	7	6.40	0.21	3.16	2.487	78.59	9.63	0.32	4.77	3.742	78.53	
CO	NORMAL	7	5.37	0.11	2.29	2.252	98.47	9.97	0.20	4.26	4.195	98.47	
	MILITARY	7	5.24	0.10	2.24	2.332	104.32	10.34	0.20	4.42	4.607	104.30	
	LO GRND-IDLE	7	32.72	30.47	31.72	0.764	2.41	20.6	17.7	19.0	1.10	0.58	
	HI GRND-IDLE	7	11.84	5.97	8.07	1.931	23.94	9.0	4.3	5.9	1.58	2.66	
NOX	APPROACH	7	8.09	4.56	6.05	1.167	19.21	6.82	3.7	5.0	1.03	2.05	
	CRUISE	7	5.59	2.40	3.20	1.080	33.70	8.3	3.5	4.8	1.59	3.30	
	NORMAL	7	3.00	1.73	2.17	0.399	18.24	5.4	3.1	4.1	0.71	1.74	
	MILITARY	7	2.37	1.58	1.95	0.251	12.88	4.5	3.1	3.8	0.44	1.15	
NO2	LO GRND-IDLE	7	4.47	3.56	3.90	0.327	8.38	2.65	2.06	2.33	0.217	9.32	
	HI GRND-IDLE	7	8.86	6.39	7.08	0.691	12.58	6.70	4.60	5.19	0.722	13.91	
	APPROACH	7	7.01	5.98	6.46	0.409	6.33	5.82	4.96	5.34	0.334	6.26	
	CRUISE	7	9.60	7.28	8.00	0.776	9.07	14.50	11.32	12.93	1.095	8.47	
NO	NORMAL	7	9.91	8.18	9.12	0.787	4.63	16.47	14.95	18.90	1.410	8.35	
	MILITARY	7	13.07	8.43	9.22	0.680	7.38	19.76	16.51	18.16	1.234	6.79	
	LO GRND-IDLE	7	1.93	0.29	1.16	0.522	44.62	1.22	0.17	0.70	0.328	46.70	
	HI GRND-IDLE	6	7.35	4.59	5.76	0.932	16.13	5.56	3.28	4.25	0.753	17.74	
NO2	APPROACH	7	8.23	4.41	5.48	0.594	10.54	5.05	3.61	4.53	0.486	10.71	
	CRUISE	7	5.76	6.55	7.74	0.747	9.66	13.23	9.86	11.64	1.067	9.17	
	NORMAL	7	9.52	7.03	8.32	0.911	10.94	17.44	13.05	15.42	1.605	10.41	
	MILITARY	7	9.56	6.99	8.26	0.531	11.27	18.83	13.81	16.28	1.776	10.91	
SOx	LO GRND-IDLE	7	3.59	1.93	2.74	0.572	20.85	2.08	1.13	1.63	0.310	19.06	
	HI GRND-IDLE	6	1.97	0.93	1.37	0.369	26.99	1.41	0.67	1.00	0.257	25.69	
	APPROACH	7	1.69	0.59	0.96	0.403	41.16	1.38	0.31	0.81	0.329	40.65	
	CRUISE	7	1.60	0.28	0.86	0.470	54.68	2.41	0.44	1.29	0.705	54.54	
SO2	NORMAL	7	1.52	0.43	0.82	0.449	55.08	2.82	0.60	1.51	0.841	55.65	
	MILITARY	7	1.85	0.47	0.96	0.609	63.20	3.64	0.95	1.89	1.203	63.48	
	LO GRND-IDLE	0						0.25	0.23	0.24	0.011	4.48	
	HI GRND-IDLE	0						0.30	0.26	0.29	0.008	2.58	
SO2	APPROACH	0						0.34	0.32	0.33	0.010	3.03	
	CRUISE	0						0.62	0.59	0.60	0.010	1.67	
	NORMAL	0						0.76	0.72	0.74	0.013	1.81	
	MILITARY	0						0.81	0.77	0.79	0.013	1.63	

7 SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-006-1225

REPORT DATE 02/11/77
 USAF CONTRACT F29601-75-C-0040

ENGINE MODEL : T56-A7A

TEST LOCATION : KELLY AFB

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***** CATEGORY B TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - #/HR					SMOKE NUMBER						
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR
LO GRND-IDLE	7	630	570	597	25.1	4.21	7	34.00	13.75	23.16	7.534	32.51
HI GRND-IDLE	7	760	695	732	25.6	3.50	7	33.75	21.00	27.30	4.466	16.36
APPROACH	7	654	800	827	22.6	2.73	7	36.13	26.00	30.56	3.678	12.11
CRUISE	7	1556	1470	1504	27.7	1.84	7	42.65	32.75	35.81	3.393	9.48
NORMAL	7	1900	1800	1853	32.0	1.73	7	40.13	28.50	36.14	4.629	12.81
MILITARY	7	2036	1920	1972	37.0	1.86	7	44.63	28.25	37.66	6.141	15.31

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 MASSACHUSETTS ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-006-1275

REPORT DATE 02/11/77
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : 150-A7B

TEST LOCATION : KELLY AFB

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***** CATEGORY C TESTS ONLY *****

EXHAUST MASS EMISSION INDICES :

PAPAM	TEST MODE	# / 1000# FUEL					# / HR					
		NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV
T-28	LO GRND-IDLE	1	18.88	18.88			1	10.86	10.86			
	HI GRND-IDLE	1	1.62	1.62			1	1.17	1.17			
	APPROACH	0					0					
	CRUISE	0					0					
C-130	NORMAL	1	0.68	0.68			1	1.25	1.25			
	MILITARY	1	0.36	0.36			1	0.71	0.71			
	LO GRND-IDLE	1	31.70	31.70			1	18.2	18.2			
	HI GRND-IDLE	1	5.97	5.97			1	4.3	4.3			
M-26	APPROACH	0					0					
	CRUISE	0					0					
	NORMAL	1	1.73	1.73			1	3.2	3.2			
	MILITARY	1	1.55	1.55			1	3.0	3.0			
M-26	LO GRND-IDLE	1	3.51	3.51			1	2.02	2.02			
	HI GRND-IDLE	1	6.38	6.38			1	4.59	4.59			
	APPROACH	0					0					
	CRUISE	0					0					
M-26	NORMAL	1	7.92	7.92			1	14.46	14.46			
	MILITARY	1	6.15	6.15			1	15.82	15.82			
	LO GRND-IDLE	1	0.77	0.77			1	0.44	0.44			
	HI GRND-IDLE	1	5.39	5.39			1	3.88	3.88			
M-26	APPROACH	0					0					
	CRUISE	0					0					
	NORMAL	1	7.33	7.33			1	13.36	13.36			
	MILITARY	1	7.40	7.40			1	14.35	14.35			
M-26	LO GRND-IDLE	1	2.74	2.74			1	1.57	1.57			
	HI GRND-IDLE	1	0.99	0.99			1	0.71	0.71			
	APPROACH	0					0					
	CRUISE	0					0					
M-26	NORMAL	1	0.59	0.59			1	1.06	1.06			
	MILITARY	1	0.76	0.76			1	1.47	1.47			
	LO GRND-IDLE	0					0					
	HI GRND-IDLE	0					0					
M-26	APPROACH	0					1	0.23	0.23			
	CRUISE	0					1	0.29	0.29			
	NORMAL	0					0					
	MILITARY	0					0					
M-26	LO GRND-IDLE	1	0.73	0.73			1	0.73	0.73			
	HI GRND-IDLE	1	0.76	0.76			1	0.76	0.76			
	APPROACH	0					0					
	CRUISE	0					0					

7 SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-006-1275

REPORT DATE 02/11/77
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : F53-A7a

TEST LOCATION : KELLY AFB

ENGINE 5, PAGE 2

***** CATEGORY C TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - R/HR				SMOKE NUMBER							
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR
LO BRD-IDLE	1	575	575				1	20.25	20.25			
HI BRD-IDLE	1	720	720				1	26.00	26.00			
APPROACH	0						0					
CRUISE	0						0					
NORMAL	1	1825	1825				1	43.50	43.50			
MILITARY	1	1940	1940				1	45.25	45.25			

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TEST LOCATION : KELLY AFB

***** CATEGORY A TESTS ONLY *****

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	E / 1000# FUEL					# / HR						
		NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR
THC	IDLE	4	2.55	1.40	2.29	3.53	17.11	4	33.65	21.85	26.12	5.173	19.80
	INTERMED.	4	0.34	0.08	0.26	0.122	46.59	4	2.95	0.89	2.33	1.093	46.96
	NORMAL	4	0.43	0.08	0.21	0.155	71.91	4	4.85	0.99	2.51	1.702	67.73
	MILITARY	4	0.34	0.07	0.18	0.124	67.30	4	4.24	0.89	2.31	1.550	67.04
	TAKE-OFF	2	0.26	0.11	0.18	0.106	57.33	2	3.46	1.16	2.31	1.626	70.40
CO	IDLE	4	72.83	60.94	66.73	4.984	7.47	4	85.8	68.6	75.7	7.23	0.96
	INTERMED.	4	0.85	0.73	0.80	0.056	7.00	4	7.6	6.4	7.1	0.59	0.82
	NORMAL	4	0.81	0.61	0.68	0.088	12.96	4	9.9	7.3	8.2	1.20	1.46
	MILITARY	4	0.81	0.57	0.68	0.098	14.42	4	10.2	7.2	8.6	1.24	1.44
	TAKE-OFF	2	0.66	0.52	0.59	0.099	16.78	2	7.0	6.4	6.5	0.07	0.10
NOX	IDLE	4	3.59	2.41	2.95	0.525	17.82	4	4.04	2.72	3.34	0.628	18.79
	INTERMED.	4	22.88	17.02	20.60	2.563	12.94	4	203.74	151.64	183.57	23.342	12.72
	NORMAL	4	31.49	25.57	28.36	3.037	10.71	4	369.58	269.91	341.79	46.172	13.51
	MILITARY	4	30.69	27.16	28.52	1.554	5.45	4	393.96	339.93	361.99	23.108	6.38
	TAKE-OFF	2	30.50	26.60	28.55	2.758	9.85	2	408.19	277.52	342.85	92.398	26.95
NO	IDLE	4	0.21	0.09	0.15	0.059	39.25	4	0.24	0.11	0.17	0.067	38.85
	INTERMED.	4	20.80	14.95	18.04	2.435	13.50	4	185.21	133.21	160.76	22.030	13.70
	NORMAL	4	28.35	22.26	25.21	3.037	12.05	4	345.11	260.74	303.71	43.463	14.31
	MILITARY	4	28.82	22.97	26.36	2.677	10.16	4	369.95	292.35	334.51	35.457	10.60
	TAKE-OFF	2	29.95	24.24	26.89	3.755	13.96	2	395.57	252.85	324.21	0.916	31.13
SO _x	IDLE	4	3.80	2.31	2.79	0.478	17.09	4	3.82	2.82	3.17	0.562	17.73
	INTERMED.	4	3.17	2.07	2.56	0.569	22.29	4	28.61	18.43	22.81	5.144	22.55
	NORMAL	4	4.25	2.08	3.15	0.999	31.71	4	52.63	25.25	38.07	12.977	34.08
	MILITARY	4	4.71	0.39	2.16	1.821	84.22	4	59.99	4.94	27.48	23.232	84.54
	TAKE-OFF	2	2.36	0.94	1.55	1.004	60.85	2	24.67	12.82	18.84	8.521	45.70
SO ₂	IDLE	0						4	1.13	0.67	0.90	0.189	20.94
	INTERMED.	0						4	8.90	5.41	7.11	1.426	20.04
	NORMAL	0						4	12.21	7.42	9.60	1.989	20.71
	MILITARY	0						4	12.71	7.65	10.13	2.052	20.25
	TAKE-OFF	0					2	10.70	8.34	9.52	1.669	17.53	

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-006-1275

REPORT DATE 02/11/77
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : TF39

TEST LOCATION : KELLY AFB

ENGINE C, PAGE 2

***** CATEGORY A TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBERS:

TEST MODE	NO. OBS	MEAS. FUEL FLOW - #/HR			STND DEV	% COEF VAR	SMOKE NUMBER			STND DEV	% COEF VAR
		MAX VALUE	MIN VALUE	MEAN			MAX VALUE	MIN VALUE	MEAN		
ICE	4	1174	1099	1134	32.8	2.90	1.93	0.77	1.35	0.820	60.76
INTERMEDIATE	4	9030	6790	6909	96.0	1.10	7.93	5.85	6.89	1.471	21.35
NORMAL	4	12370	11340	12025	464.5	3.86	7.36	3.93	5.64	2.425	42.97
MILITARY	4	12835	12515	12668	133.0	1.05	5.14	4.86	5.00	0.198	3.96
TAKE-OFF	2	15385	10432	11909	2088.1	17.53	4.14	4.14			

ENGINE MODEL : F-105
 TEST LOCATION : WELLYARF4
 ENGINE 6, PAGE 1

PARAM	TEST MODE	NO. OBS	# / 1000 # FUEL				# / HP					
			MAX VALUE	MIN VALUE	MEAN	STND DEV	* COEF VAR	MAX VALUE	MIN VALUE	MEAN	STND DEV	* COEF VAR
THC	LOLE	4	24.56	17.46	22.96	3.933	17.11	33.65	21.85	26.12	5.173	19.590
	INTERMED.	4	8.34	8.88	8.26	8.132	46.59	2.95	2.93	2.93	1.493	46.96
	MILITARY	4	8.34	8.34	8.21	8.155	71.91	4.85	4.99	2.51	1.782	67.73
	TAKE-OFF	2	8.26	8.11	8.10	8.186	57.55	3.24	4.89	2.31	1.558	67.84
CO	LOLE	4	72.83	68.94	66.73	4.994	7.47	85.8	68.6	75.7	7.23	8.96
	INTERMED.	4	8.85	8.73	8.66	4.856	7.55	7.6	8.4	7.1	4.59	8.82
	MILITARY	4	8.81	8.61	8.66	4.888	12.96	9.9	7.3	8.2	1.28	1.46
	TAKE-OFF	2	8.66	8.52	8.59	3.852	16.74	7.8	6.9	6.9	4.87	4.14
NOx	LOLE	4	3.59	2.41	2.95	4.526	17.82	4.84	2.72	3.34	4.628	18.79
	INTERMED.	4	22.84	17.82	23.58	2.563	12.55	243.74	151.64	183.57	23.342	12.72
	MILITARY	4	31.69	25.57	28.35	3.837	16.71	349.58	289.91	341.79	46.172	13.51
	TAKE-OFF	2	38.58	26.67	24.55	2.754	9.66	448.19	277.52	342.85	92.398	6.38
NO2	LOLE	4	8.21	8.87	8.12	4.854	39.25	8.24	8.11	8.17	4.867	38.85
	INTERMED.	4	28.68	19.94	18.64	2.434	13.54	145.21	133.21	168.76	22.834	13.74
	MILITARY	4	24.36	22.26	25.21	3.437	12.45	345.11	268.74	383.71	43.463	14.31
	TAKE-OFF	2	24.85	24.24	26.34	3.755	13.06	459.45	292.35	334.51	35.457	18.58
SOx	LOLE	4	3.48	2.31	2.74	4.474	17.89	3.82	2.62	3.17	4.562	17.73
	INTERMED.	4	3.17	2.87	2.36	4.568	22.24	24.61	18.43	22.81	5.144	22.55
	MILITARY	4	4.25	2.86	3.15	4.711	31.71	52.63	25.29	38.87	12.977	34.88
	TAKE-OFF	2	2.36	2.34	1.92	1.884	64.85	24.67	12.62	18.64	4.521	45.74
SO2	LOLE	4	1.13	1.13	1.13	1.188	64.85	1.13	1.13	1.13	1.189	20.74
	INTERMED.	4	9.94	5.41	7.11	1.426	20.84	9.94	5.41	7.11	1.426	20.84
	MILITARY	4	12.21	7.42	9.68	1.989	20.71	12.21	7.42	9.68	1.989	20.71
	TAKE-OFF	2	14.78	8.34	9.52	1.669	17.53	14.78	8.34	9.52	1.669	17.53

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1443-086-1275

REPORT DATE 8/22/76
 USAF CONTRACT F29681-75-C-8844

ENGINE MODEL : TF30

TEST LOCATION : KELLY AFB

ENGINE 4, PAGE 2

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	NO. OF TESTS	MEAS. FUEL FLOW - g/hr			STND DEV	* COEFF VAR	SMOKE NUMBER			STND DEV	* COEFF VAR
		MAX VALUE	MIN VALUE	MEAN			MAX VALUE	MIN VALUE	MEAN		
idle	4	1179	1073	1134	32.0	2.98	1.73	8.77	1.35	8.824	68.75
INTERMED. 1	4	9834	8792	8967	95.4	1.14	7.73	5.85	6.89	1.471	21.35
NORMAL	4	12470	11360	12022	664.0	3.86	7.36	3.93	5.64	2.425	42.97
MILITARY	4	12835	12515	12655	133.2	1.85	5.14	4.85	5.88	8.198	3.95
TAKE-OFF	2	13285	10432	11907	2800.1	17.53	4.14	4.14			

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TORBINE ENGINE EMISSIONS INVENTORIES
 ENGINE MODEL SUMMARY REPORT

SET 1492-0004-4476

REPORT DATE 04/20/76
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : J57-021*

TEST LOCATION : THUNDER 464

ENGINE 17, PAGE 1

*** CATEGORY A TESTS ONLY ***

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	# / 1000# FUEL				# / 10							
		NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	K COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	K COEF VAR
THC	IDLE	1	65.22	65.22				1	67.96	67.96			
	INTERMED. P	0	0.27	0.27				0	1.56	1.56			
	MILITARY	1	0.84	0.84				1	0.62	0.62			
CO	IDLE	1	72.67	72.67				1	75.7	75.7			
	INTERMED. P	0	3.49	3.49				0	24.4	24.4			
	MILITARY	1	2.02	2.02				1	15.1	15.1			
NOx	IDLE	1	2.41	2.41				1	2.51	2.51			
	INTERMED. P	0	0.26	0.26				0	0.44	0.44			
	MILITARY	1	0.76	0.76				1	73.01	73.01			
NO	IDLE	1	0.23	0.23				1	0.24	0.24			
	INTERMED. P	0	6.54	6.54				0	30.50	30.50			
	MILITARY	1	0.15	0.15				1	0.07	0.07			
NO2	IDLE	1	2.18	2.18				1	2.27	2.27			
	INTERMED. P	0	1.60	1.60				0	0.46	0.46			
	MILITARY	1	1.61	1.61				1	12.14	12.14			
SOx	IDLE	0						1	0.03	0.03			
	INTERMED. P	0						0					
	MILITARY	0						1	0.09	0.09			

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-084-8876

REPORT DATE 8/28/76
 USAF CONTRACT F29681-75-C-8846

ENGINE MODEL : J57-P21H

TEST LOCATION : TINKER AFM

ENGINE 17, PAGE 2

*** CATEGORY A TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - g/min			SMOKE NUMBER		
	NO. OBS	MAX VALUE	MIN VALUE	NO. OBS	MAX VALUE	MIN VALUE
IDLE	1	1442	1442	1	8.75	8.75
INTERMED. 1	1	5864	2764	1	59.92	59.92
INTERMED. 2	1	7465	7465	1	51.63	51.63
MILITARY	1			1		

ENGINE MODEL : J57-0214

TEST LOCATION : LINKEY AFB

ENGINE 17, PAGE 1

*** CATEGORY B TESTS ONLY ***

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	# / 1000 FUEL			# / HR			% COEF VAR	STND DEV	% COEF VAR
			MAX VALUE	MIN VALUE	MEAN	STND DEV	MAX VALUE	MIN VALUE			
THC	IDLE	3	55.29	52.14	53.64	1.647	3.08	59.66	49.54	56.19	5.764
	INTERMED. 1	3	1.37	0.36	0.71	0.564	7.88	2.14	3.92	3.046	77.53
	MILITARY	3	0.75	0.24	0.42	0.286	6.014	4.73	1.66	1.778	65.97
CO	IDLE	3	71.75	69.02	70.03	1.435	2.13	77.9	68.2	73.5	0.92
	INTERMED. 1	3	4.44	3.27	3.15	0.585	15.21	23.7	19.6	21.4	0.99
	MILITARY	3	3.33	2.38	2.74	0.520	19.01	28.2	15.1	17.5	2.56
NOx	IDLE	3	2.26	2.19	2.23	0.036	1.62	2.54	2.12	2.34	0.211
	INTERMED. 1	3	7.63	7.07	7.26	0.323	4.45	45.91	37.76	40.65	4.563
	MILITARY	3	1.64	1.47	1.54	0.1754	7.59	50.23	46.98	53.76	5.631
NO	IDLE	3	1.08	0.97	0.96	0.307	4.53	1.02	0.53	0.74	0.245
	INTERMED. 1	3	6.59	5.84	6.13	0.401	6.53	39.65	31.17	34.39	4.593
	MILITARY	3	9.00	7.84	8.58	0.514	7.23	52.32	39.93	46.12	6.195
CO2	IDLE	3	1.74	1.14	1.47	0.315	21.38	73.72	57.36	66.68	8.416
	INTERMED. 1	3	1.24	1.04	1.12	0.097	9.65	2.41	1.18	1.57	0.455
	MILITARY	3	1.26	1.15	1.19	0.061	5.11	5.59	5.93	6.26	0.350
SOx	IDLE	3	1.69	1.23	1.46	0.114	8.35	11.59	8.46	10.56	1.403
	INTERMED. 1	3	4.04	3.41	3.72	0.34	11.59	4.04	4.76	4.94	0.072
	MILITARY	3	5.52	4.86	5.15	0.52	6.55	4.01	4.21	4.47	0.296
		3	6.55	5.85	6.20	0.55	5.85	6.55	6.20	6.55	0.350

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-ADR-0075

REPORT DATE 03/19/75
 USAF CONTRACT F29601-75-C-0045

ENGINE MODEL : J57-P21H

TEST LOCATION : TIKKER AFB

ENGINE 17, PAGE 2

*** CATEGORY H TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - #/HR			MEAS. SMOKE NUMBER								
	NO. OHS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR	NO. OHS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR
LOLE	3	1123	954	1051	69.9	6.56	3	1400	1100	12.17	1.607	13.21
INTERMED. 1	3	5814	5340	5590	369.2	6.50	3	50.54	56.00	50.67	2.363	4.63
INTERMED. 2	3	6404	5075	6002	422.7	6.56	3	52.00	58.00	60.50	2.179	3.58
MILITARY	3	8143	7316	7752	630.5	5.86	3	52.50	53.00	61.00	2.594	4.25

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TORQUE ENGINE EMISSIONS LABORATORY
 ENGINE MODEL SUMMARY REPORT

SET 1475-047-0476

REPORT DATE #4/20/76
 USAF CONTRACT F29601-75-C-0006

ENGINE MODEL: F-4U-7

TEST LOCATION: HANSON AFB

ENGINE 16, PAGE 1

EXHAUST GAS EMISSION INDICES

*** CATEGORY A TESTS ONLY ***

PARAM	TEST MODE	NO. OBS	# / HOUR FUEL			# / HR			STND DEV	* COEF VAR
			MAX VALUE	MIN VALUE	MEAN	MAX VALUE	MIN VALUE	MEAN		
THC	IDLE	1	30.94	30.24		28.16	28.16			
	INTERMED. P	1	8.15	8.15		8.83	8.83			
	MILITARY	1	8.69	8.69		8.58	8.58			
CO	IDLE	1	53.36	53.36		48.6	48.6			
	INTERMED. P	1	1.13	1.11		6.1	6.1			
	MILITARY	1	8.72	8.72		5.8	5.8			
NOx	IDLE	1	3.13	3.13		2.91	2.91			
	INTERMED. P	1	15.26	15.26		83.54	83.54			
	MILITARY	1	26.95	26.95		146.89	146.89			
NO	IDLE	1	8.27	8.27		8.24	8.24			
	INTERMED. P	1	13.48	13.48		73.98	73.98			
	MILITARY	1	18.54	18.54		124.25	124.25			
NO2	IDLE	1	3.62	3.62		3.12	3.12			
	INTERMED. P	1	1.76	1.74		9.74	9.74			
	MILITARY	1	2.41	2.41		16.84	16.84			
SOx	IDLE	1				8.73	8.73			
	INTERMED. P	1				4.38	4.38			
	MILITARY	1				5.57	5.57			

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SFT 1492-DAS-8876

REPORT DATE 03/28/75
 USAF CONTRACT F29601-75-C-8846

ENGINE MODEL : TF33-P7

TEST LOCATION : TINKER AFB

ENGINE 16, PAGE 2

*** CATEGORY A TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - GPH			SMOKE NUMBER				
	NO. OBS	MAX VALUE	MEAN	STND DEV	MIN VALUE	MEAN	STND DEV	% COEF VAR
-----	-----	-----	-----	-----	-----	-----	-----	-----
IDLE	1	918	718			1.83	1.83	
INTERMED.	1	5458	5458			27.17	27.17	
INTERMED. MILITARY	1	5473	5473			27.63	27.63	

ENGINE MODEL : F4U-17

TEST LOCATION : TINKER AFB

ENGINE IN PAGE 1

*** CATEGORY B TESTS ONLY ***

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR	# / 1000 FUEL			# / HR		
								NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR
THC	IDLE	3	34.63	24.87	29.74	4.448	16.41	31.43	25.17	27.17	3.341	12.29	
	INTERMED. 1	3	12.22	8.10	9.84	2.892	21.14	58.55	38.87	46.48	18.336	22.45	
	INTERMED. 2	3	14.55	8.23	11.34	3.164	27.91	44.55	44.44	61.42	18.317	29.82	
CO	MILITARY	3	22.66	8.51	13.74	7.751	56.47	159.15	59.73	95.32	55.488	58.12	
	IDLE	3	57.64	43.59	52.56	7.484	14.85	51.6	44.1	48.8	3.76	8.78	
	INTERMED. 1	3	1.74	1.67	1.68	0.016	0.91	8.1	7.9	8.0	0.12	0.14	
NOX	INTERMED. 2	3	1.34	1.15	1.24	0.078	6.24	7.2	6.2	6.7	0.58	0.75	
	MILITARY	3	1.14	0.75	0.91	0.237	26.13	4.3	5.1	6.3	1.74	2.77	
	IDLE	3	3.84	2.54	2.77	0.244	8.41	3.47	2.14	2.56	0.458	17.85	
NO	INTERMED. 1	3	11.45	11.21	11.33	0.119	1.22	55.41	52.58	53.69	1.268	2.35	
	INTERMED. 2	3	13.75	13.11	13.47	0.344	2.57	75.22	78.35	72.47	3.254	4.49	
	MILITARY	3	18.45	17.88	17.82	0.745	4.14	124.63	113.35	123.16	4.686	6.99	
SO2	IDLE	3	4.07	0.26	0.33	0.118	31.64	0.47	0.23	0.32	0.131	0.86	
	INTERMED. 1	3	18.25	6.07	9.66	1.896	28.96	49.44	32.18	43.84	9.392	21.84	
	INTERMED. 2	3	12.52	11.76	12.11	0.384	3.17	59.44	63.87	65.61	3.272	6.99	
SOX	MILITARY	3	17.18	15.81	16.46	0.645	3.92	128.12	105.45	113.74	7.583	6.64	
	IDLE	3	2.57	2.26	2.41	0.154	6.74	2.44	1.41	2.24	0.346	15.45	
	INTERMED. 1	3	4.36	4.23	4.27	1.244	75.97	24.32	5.44	14.74	0.334	7.91	
Sulf	INTERMED. 2	3	1.45	1.24	1.27	0.082	6.45	7.28	6.44	6.87	0.442	6.44	
	MILITARY	3	1.56	1.14	1.37	0.194	13.54	14.23	7.94	9.46	1.496	15.81	
	IDLE	3	4.07	0.26	0.33	0.118	31.64	0.47	0.23	0.32	0.131	0.86	
Sulf	INTERMED. 1	3	11.45	11.21	11.33	0.119	1.22	55.41	52.58	53.69	1.268	2.35	
	INTERMED. 2	3	13.75	13.11	13.47	0.344	2.57	75.22	78.35	72.47	3.254	4.49	
	MILITARY	3	18.45	17.88	17.82	0.745	4.14	124.63	113.35	123.16	4.686	6.99	

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1452-044-8876

USAF CONTRACT F29601-75-C-8046
 REPORT DATE 08/19/76

ENGINE MODEL : F335P7

TEST LOCATION : TINKER AFB

ENGINE 16, PAGE 2

*** CATEGORY B TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST CODE	MEAS. FUEL FLOW - #/HR			SMOKE NUMBER		
	NO. OBS	MAX VALUE	MIN VALUE	MEAN VALUE	STND DEV	% COEF VAR
FULE	3	1612	852	928	82.7	8.78
INTERMET. 1	3	4748	4664	4744	53.3	1.12
INTERMET. 2	3	5537	5358	5417	184.2	1.92
MILITARY	3	7825	6668	6984	266.4	2.95
				MAX VALUE	MIN VALUE	MEAN
				3588	2478	4457
				4588	2954	3250
				4758	3258	3448
				4858	3858	3317
						STND DEV
						2977
						2972
						2787
						2389
						% COEF VAR
						65.19
						9.83
						7.57
						6.76

ENGINE MODEL : F4U-010A

TEST LOCATION : TTAGC-AF4

ENGINE 15, PAGE 1

EXHAUST MASS EMISSION INDICES :

SEE CATEGORY A TESTS ONLY ***

PARAM	TEST MODE	NO. OBS	# / 13.9% FUEL			# / HR							
			MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR
THC	SOLE	1	20.22	20.22				1	17.21	17.21			
	INTERMED.	4	9.12	9.12				4	4.88	4.88			
	MILITARY	1	4.89	4.89				1	4.86	4.86			
CO	SOLE	1	48.91	48.91				1	41.6	41.6			
	INTERMED.	4	6.65	6.65				4	4.7	4.7			
	MILITARY	1	6.72	6.72				1	6.6	6.6			
NOX	SOLE	1	2.74	2.74				1	2.53	2.53			
	INTERMED.	4	23.53	26.03				4	148.68	148.68			
	MILITARY	1	29.05	29.64				1	273.29	273.29			
NO	SOLE	1	8.78	8.78				1	8.54	8.54			
	INTERMED.	4	16.52	16.52				4	132.48	132.48			
	MILITARY	1	25.93	25.93				1	239.88	239.88			
NO2	SOLE	1	2.26	2.26				1	1.74	1.74			
	INTERMED.	4	2.32	2.32				4	15.52	16.52			
	MILITARY	1	3.71	3.71				1	30.21	30.21			
SOX	SOLE	4						4	4.05	4.05			
	INTERMED.	4						4	7.13	7.13			
	MILITARY	4						4	9.21	9.21			

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TORBINE ENGINE EMISSIONS FACILITY
 ENGINE MODEL SUMMARY REPORT

SCT 1492-024-8874
 USAF CONTRACT F29691-75-C-0046

REPORT DATE 8/28/76
 ENGINE 15, PAGE 2

TEST LOCATION : TUNBER AFB

ENGINE MODEL : T34-1144

*** CATEGORY A TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - g/hr			SMOKE NUMBER		
	NO. OBS	MAX VALUE	MEAN	STND DEV	MEAN	STND DEV
IDLE	1	5.01	5.01		1.84	
INTERMED. 1	1	21.03	21.03		24.58	
INTERMED. 2	1	22.28	22.28		24.58	
MILITARY	1					

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
USAF FURGINE ENGINE EMISSIONS INVENTORY
ENGINE MODEL SUMMARY REPORT

SFT 1492-00A-0976

USAF CONTRACT F29681-75-C-0046
REPORT DATE 08/19/76

ENGINE MODEL : TFR8-PL40

TEST LOCATION : TINGER AFB

ENGINE 15, PAGE 1

*** CATEGORY B TESTS ONLY ***

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	MAX VALUE		MEAN		STND DEV		K COEF VAR	NO. OBS	MAX VALUE		MEAN		STND DEV		K COEF VAR
			MIN	VALUE	MIN	VALUE	MIN	VALUE			MIN	VALUE	MIN	VALUE	MIN	VALUE	
THC	IDLE	4	17.21	16.38	16.15	1.549	0.53	8.53	4	19.53	17.54	18.41	0.957	5.28			
	INTERMED. 1	4	3.53	0.57	3.53	3.551	91.23	4	35.88	3.61	24.64	22.619	90.98				
	INTERMED. 2	4	5.94	1.85	2.94	2.142	72.91	4	42.56	7.46	21.13	15.428	72.98				
CO	MILITARY	4	5.58	1.89	3.27	2.839	61.92	4	51.53	10.83	29.95	18.628	62.28				
	IDLE	4	51.05	44.77	49.42	3.377	7.83	4	53.9	46.1	48.8	3.57	8.73				
	INTERMED. 1	4	1.21	0.82	0.75	0.176	16.53	4	7.7	5.2	6.8	1.14	1.38				
NOX	INTERMED. 2	4	1.14	0.61	0.88	0.216	26.92	4	7.9	4.3	5.7	1.56	2.72				
	MILITARY	4	1.88	0.55	0.77	0.186	24.17	4	9.2	4.9	7.8	1.77	2.54				
	IDLE	4	2.57	2.64	2.74	0.182	3.73	4	2.91	2.58	2.78	0.144	5.16				
NO	INTERMED. 1	4	17.71	15.76	15.84	0.887	4.74	4	111.62	100.68	106.66	4.521	4.24				
	INTERMED. 2	4	21.51	18.39	19.59	1.324	5.64	4	153.53	131.54	142.87	9.836	6.32				
	MILITARY	4	27.62	23.81	25.44	1.793	6.77	4	251.33	219.82	241.32	15.818	6.22				
SO2	IDLE	4	0.54	0.44	0.46	0.042	8.67	4	0.55	0.39	0.58	0.074	14.88				
	INTERMED. 1	4	15.81	14.88	15.89	0.764	5.14	4	99.63	89.46	95.57	4.321	4.52				
	INTERMED. 2	4	19.23	15.61	17.57	0.797	4.53	4	129.64	117.41	126.19	5.895	4.57				
SOX	MILITARY	4	24.29	21.25	23.57	1.421	6.89	4	223.97	195.52	213.88	12.665	5.95				
	IDLE	4	2.43	2.16	2.25	0.124	5.49	4	2.37	2.19	2.29	0.083	3.51				
	INTERMED. 1	4	1.46	1.56	1.75	0.141	8.65	4	11.99	9.89	11.89	0.888	7.74				
SOX	INTERMED. 2	4	3.37	1.93	2.32	0.594	30.11	4	23.97	13.88	16.67	4.879	29.26				
	MILITARY	4	3.81	2.55	3.11	0.524	16.83	4	33.96	23.58	28.31	4.328	15.26				
	IDLE	4	1.48	0.72	0.87	0.153	17.58	4	1.48	0.72	0.87	0.153	17.58				
SOX	INTERMED. 1	4	5.32	5.84	5.38	0.626	11.52	4	5.32	5.84	5.38	0.626	11.52				
	INTERMED. 2	4	7.17	5.68	6.18	0.716	11.74	4	7.17	5.68	6.18	0.716	11.74				
	MILITARY	4	9.21	7.12	7.74	0.982	12.57	4	9.21	7.12	7.74	0.982	12.57				

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-044-8876

REPORT DATE 08/19/76
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : TF38-P10A

TEST LOCATION : TIRREM AFB

ENGINE 15. PAGE 2

*** CATEGORY B TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - g/hr				SMOKE NUMBER							
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STDEV	COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STDEV	COEF VAR
TULE	4	1480	890	1017	87.2	0.56	4	5.00	3.50	4.30	0.750	17.14
INTERMED. 1	4	6340	5003	5336	37.6	4.50	4	36.50	33.00	34.50	1.672	4.27
INTERMED. 2	4	7243	7106	7176	79.3	1.18	4	35.50	24.00	31.60	3.076	9.73
MILITARY	4	9214	8000	8114	101.6	1.55	4	31.00	25.00	27.00	2.073	10.45

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TOP SECRET ENGINE EMISSIONS INVENTORY
 ENGINE MODEL NUMBER REPORT

SET 1492-309-8876

USAF CONTRACT F29681-75-C-8846

ENGINE MODEL: F105-80

TEST LOCATION: LINCOLN AFB

ENGINE 14, PAGE 1

*** CATEGORY A TESTS ONLY ***

EXHAUST MASS EMISSION INDICES :

PARAM	TEST CODE	NO. OBS	# / 10 ⁶ GALL		# / HP		STND DEV	* COEF VAR
			MAX VALUE	MIN VALUE	MAX VALUE	MIN VALUE		
THC	100E	1	62.11	62.11	51.24	51.24		
	INTERMED.	2	4.17	6.19	4.92	4.92		
	MILITARY	1	6.12	6.12	4.71	4.71		
CO	100E	1	71.54	71.54	59.4	59.4		
	INTERMED.	2	2.65	2.65	14.1	14.1		
	MILITARY	1	1.25	1.25	7.5	7.5		
NOx	100E	1	2.42	2.42	1.99	1.99		
	INTERMED.	2	11.63	11.63	57.54	57.54		
	MILITARY	1	14.48	14.48	44.73	44.73		
NO	100E	1	4.38	4.38	4.24	4.24		
	INTERMED.	2	4.82	4.82	48.57	48.57		
	MILITARY	1	12.95	12.95	72.99	72.99		
NO2	100E	1	2.12	2.12	1.75	1.75		
	INTERMED.	2	1.41	1.41	4.97	4.97		
	MILITARY	1	1.24	1.24	11.74	11.74		
SOx	100E	1			4.66	4.66		
	INTERMED.	2			3.95	3.95		
	MILITARY	1			4.84	4.84		

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVESTIGATION
 ENGINE MODEL SUMMARY REPORT

REPORT DATE 88/28/76
 USAF CONTRACT F29691-75-C-0046

ENGINE MODEL : T33-PA
 TEST LOCATION : TINKER AFB
 ENGINE 14, PAGE 2

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW (GPH)			SMOKE NUMBER				
	MAX VALUE	MIN VALUE	STND DEV	COEF VAR	MAX VALUE	MIN VALUE	STND DEV	% COEF VAR
TURB	0.25	0.25			4.25	4.25		
INTERMED	0.25	0.25			28.48	28.48		
MILITARY	0.25	0.25			24.21	24.21		

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR
THC	IDLE	3	73.24	51.43	62.87	18.924	17.35	3	58.24	45.47	52.92	6.638	12.54
	INTERMED. 1	3	6.82	4.94	5.57	8.54	16.11	3	26.21	21.24	24.32	2.588	11.05
	INTERMED. 2	3	14.87	4.45	5.28	8.377	91.42	3	42.47	28.35	45.22	48.934	98.53
CO	MILITARY	3	17.53	5.74	7.11	6.543	66.21	3	145.89	35.37	68.92	39.863	64.12
	IDLE	3	75.86	65.84	72.77	6.575	7.83	3	63.44	58.2	61.4	2.82	8.46
	INTERMED. 1	3	9.47	3.14	3.68	8.759	21.49	3	19.2	13.1	15.6	3.18	2.83
NOX	INTERMED. 2	3	3.87	2.82	2.53	8.537	21.26	3	15.1	9.7	12.5	2.68	2.89
	MILITARY	3	2.11	1.15	1.52	8.513	34.19	3	12.7	7.1	9.3	2.97	3.18
	IDLE	3	2.55	1.88	2.15	8.273	13.64	3	2.18	1.58	1.83	8.348	18.68
NO	INTERMED. 1	3	9.52	6.76	8.44	8.424	4.65	3	48.32	37.65	39.34	1.588	3.81
	INTERMED. 2	3	11.19	9.84	10.94	8.534	6.57	3	54.63	49.35	51.49	2.784	5.41
	MILITARY	3	14.38	12.31	13.14	1.836	7.88	3	48.11	77.48	91.13	6.852	7.46
NO2	IDLE	3	8.65	8.24	8.35	8.121	34.12	3	8.42	8.22	8.38	8.184	34.31
	INTERMED. 1	3	4.38	7.45	7.76	8.463	6.85	3	35.16	32.88	33.88	1.625	4.81
	INTERMED. 2	3	12.84	8.54	9.15	8.685	7.49	3	48.32	42.91	45.88	2.857	6.34
SOX	MILITARY	3	12.84	11.88	11.78	8.984	6.44	3	74.42	69.18	72.71	5.814	8.88
	IDLE	3	2.22	1.34	1.74	8.372	28.72	3	1.76	1.22	1.52	4.388	25.44
	INTERMED. 1	3	1.16	1.24	1.25	2.864	4.13	3	5.73	5.16	5.54	8.394	6.98
SO2	INTERMED. 2	3	1.31	1.24	1.27	8.813	1.18	3	6.94	6.31	6.48	8.875	1.17
	MILITARY	3	1.41	1.38	1.34	8.258	4.49	3	8.69	8.26	8.41	4.248	2.85
	IDLE	3	4.71	8.64	8.68	8.64	4.49	3	4.71	8.64	8.68	4.846	5.38
SO2	INTERMED. 1	3	3.64	3.39	3.44	3.39	3.85	3	3.64	3.39	3.44	4.134	3.85
	INTERMED. 2	3	4.81	3.98	3.74	4.85	1.49	3	4.81	3.98	3.74	4.85	1.49
	MILITARY	3	5.86	4.83	4.94	4.83	2.35	3	5.86	4.83	4.94	8.116	2.35

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-083-4676

REPORT DATE 08/19/76
 USAF CONTRACT F29681-75-C-4445

ENGINE MODEL : TF33-P3

TEST LOCATION : TIJKE-4F3

ENGINE 144 PAGE 2

*** CATEGORY B TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - #/HR				SMOKE NUMBER					
	NO. OBS	MAX VALUE	MEAN	STND DEV	* COEF VAR	NO. OBS	MAX VALUE	MEAN	STND DEV	* COEF VAR
LOLE	3	454	347	46.7	13.4%	3	6.88	3.83	1.266	32.8%
INTERMED. 1	3	4549	4361	165.7	3.8%	3	39.44	36.34	1.493	4.1%
INTERMED. 2	3	5415	4443	71.6	1.6%	3	37.54	35.73	1.929	5.1%
MILITARY	3	6327	6176	144.8	2.3%	3	37.74	33.44	3.851	11.3%

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TUGBOAT ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

DET 1492-044-8576

USAF CONTRACT F29601-75-C-8846

ENGINE MODEL: 3-27-64

TEST LOCATION: TUGBOAT

ENGINE 13, PAGE 1

EXHAUST GAS EMISSION RESULTS:

TEST CATEGORY & TESTS ONLY

MODEL	TEST MODE	CO				HC				NO				SOX											
		NO. OPS	MAX VALUE	MIN VALUE	STND DEV	COEF VAR	NO. OPS	MAX VALUE	MIN VALUE	STND DEV	COEF VAR	NO. OPS	MAX VALUE	MIN VALUE	STND DEV	COEF VAR	NO. OPS	MAX VALUE	MIN VALUE	STND DEV	COEF VAR				
TUG	IDLE	1	51.13	41.13							1	42.11	42.11			1	2.25	2.25			1	1.86	1.86		
	INTERMED.	1	8.87	6.62							1	4.39	4.39			1	74.54	74.54			1	7.39	7.39		
	MILITARY	1	8.87	6.62							1	4.39	4.39			1	91.95	91.95			1	7.46	7.46		
CO	IDLE	1	46.83	46.83							1	47.1	47.1			1	2.25	2.25			1	1.86	1.86		
	INTERMED.	1	2.44	2.44							1	13.7	13.7			1	74.54	74.54			1	7.39	7.39		
	MILITARY	1	1.61	1.61							1	11.5	11.5			1	91.95	91.95			1	7.46	7.46		
BOG	IDLE	1	2.22	2.22							1	2.25	2.25			1	2.25	2.25			1	1.86	1.86		
	INTERMED.	1	14.32	14.32							1	74.54	74.54			1	74.54	74.54			1	7.39	7.39		
	MILITARY	1	11.22	11.22							1	11.5	11.5			1	91.95	91.95			1	7.46	7.46		
NO	IDLE	1	4.39	4.39							1	4.39	4.39			1	4.39	4.39			1	1.86	1.86		
	INTERMED.	1	4.25	4.25							1	4.39	4.39			1	74.54	74.54			1	7.39	7.39		
	MILITARY	1	12.35	12.35							1	11.5	11.5			1	91.95	91.95			1	7.46	7.46		
SOX	IDLE	1	1.86	1.86							1	1.86	1.86			1	1.86	1.86			1	1.86	1.86		
	INTERMED.	1	1.87	1.87							1	1.86	1.86			1	1.86	1.86			1	1.86	1.86		
	MILITARY	1	1.91	1.91							1	1.86	1.86			1	1.86	1.86			1	1.86	1.86		
POL	INTERMED.	1	5.83	5.83							1	5.83	5.83			1	5.83	5.83			1	5.83	5.83		
	INTERMED.	1	5.83	5.83							1	5.83	5.83			1	5.83	5.83			1	5.83	5.83		
	MILITARY	1	5.83	5.83							1	5.83	5.83			1	5.83	5.83			1	5.83	5.83		

SCOTT ENVIRONMENTAL TECHNOLOGY, INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT
 ENGINE MODEL : 127-43

REF: 1022-043-0576

REPORT DATE: 08/24/76
 USAF CONTRACT F29601-75-C-0046

TEST LOCATION: TINKER AFB

ENGINE 13, PAGE 2

*** CATEGORY A TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST CODE	MEAS. FUEL FLOW - gpm				SMOKE NUMBER			
	NO. OBS	MAX VALUE	MEAN	STD DEV	NO. OBS	MAX VALUE	MEAN	STD DEV
FOLE	1	1012			1	7.54		
INTERMED.	1	835			1	55.68		
MILITARY	1	915			1	55.75		

ENGINE MODEL : J57-43

TEST LOCATION : TIKEX AF4

ENGINE 13, PAGE 1

*** CATEGORY B TESTS ONLY ***

EXHAUST MASS EMISSION INDICES :

PAP44	TEST MODE	NO. OBS	# / HOUR FUEL			# / HR			STND DEV	* COEF VAR
			MAX VALUE	MIN VALUE	MEAN	MAX VALUE	MIN VALUE	MEAN		
THC	IDLE	4	81.43	56.28	64.35	14.434	15.27	66.96	11.063	16.52
	INTERMED. 1	4	3.31	0.42	1.44	1.254	68.28	14.84	7.416	58.38
	INTERMED. 2	4	1.81	0.54	1.07	0.542	55.89	7.28	4.263	58.58
CO	MILITARY	4	2.21	0.88	1.46	0.537	39.58	11.58	4.932	42.59
	IDLE	4	75.81	69.88	72.35	2.754	3.42	70.8	3.66	0.52
	INTERMED. 1	4	2.88	2.59	2.73	0.146	5.36	15.8	0.71	0.45
NOX	INTERMED. 2	4	2.21	1.92	2.05	0.127	6.28	13.6	0.53	0.39
	MILITARY	4	1.66	1.51	1.59	0.462	3.84	12.3	0.65	0.53
	IDLE	4	2.29	1.96	2.14	0.157	7.33	2.18	0.159	7.57
NO	INTERMED. 1	4	9.38	7.61	8.23	0.771	9.36	47.88	5.518	11.55
	INTERMED. 2	4	14.68	8.86	9.45	0.489	4.56	62.91	7.819	11.16
	MILITARY	4	11.39	14.83	18.75	0.382	7.66	82.93	6.537	7.58
NO2	IDLE	4	0.64	0.43	0.53	0.117	21.93	0.52	0.183	19.79
	INTERMED. 1	4	0.15	0.09	0.18	0.044	18.53	41.18	0.888	11.58
	INTERMED. 2	4	0.55	0.77	0.37	0.311	9.59	55.71	6.464	11.58
SOX	MILITARY	4	14.94	9.96	9.76	0.337	8.58	75.28	6.417	8.52
	IDLE	4	1.06	1.38	1.51	0.213	13.21	1.57	0.218	13.92
	INTERMED. 1	4	1.33	0.78	1.13	0.235	26.73	6.61	1.588	24.19
SOX	INTERMED. 2	4	1.18	0.94	1.03	0.147	9.89	7.28	1.889	15.13
	MILITARY	4	1.87	0.88	0.99	0.091	9.22	7.65	0.983	12.85
	IDLE	4	1.08	0.95	1.01	0.091	9.22	0.98	0.983	12.85
SOX	INTERMED. 1	4	1.08	0.95	1.01	0.091	9.22	0.98	0.983	12.85
	INTERMED. 2	4	1.08	0.95	1.01	0.091	9.22	0.98	0.983	12.85
	MILITARY	4	1.08	0.95	1.01	0.091	9.22	0.98	0.983	12.85

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SFT 1492-DMM-8876

USAF CONTRACT F29601-75-C-8896

ENGINE MODEL : J57-43

TEST LOCATION : TINKER AFB

ENGINE 13, PAGE 2

*** CATEGORY M TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - #/HR				SMOKE NUMBER							
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEFF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEFF VAR
IDLE	4	994	949	974	22.3	2.28	4	18.44	6.58	8.97	1.752	19.52
INTERMED. 1	4	6819	5419	5795	265.3	4.58	4	54.58	54.08	56.75	2.327	4.18
INTERMED. 2	4	6919	6184	6653	341.5	5.71	4	52.54	55.54	54.84	3.482	5.31
MILITARY	4	7476	7322	7714	245.4	3.82	4	52.54	57.50	59.27	2.287	3.72

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS LABORATORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-D04-0076

USAF CONTRACT F29601-75-C-0046

REPORT DATE 08/20/76

ENGINE MODEL : J57-19A

TEST LOCATION : LINCOLN AFB

ENGINE 12, PAGE 1

*** CATEGORY A TESTS ONLY ***

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	# / 1000 FUEL			# / HR			STND DEV	% COEF VAR
			MAX VALUE	MIN VALUE	MEAN	STND DEV	MEAN	STND DEV		
THC	IDLE	1	79.13	79.13		78.74	78.74			
	INTERMED. 1	0								
	INTERMED. 2	1	0.15	0.15		0.98	0.98			
CO	MILITARY	1	0.09	0.09		0.67	0.67			
	IDLE	1	00.02	00.02		00.04	00.04			
	INTERMED. 1	0								
NOX	INTERMED. 2	1	2.39	2.39		15.7	15.7			
	MILITARY	1	1.07	1.07		14.0	14.0			
	IDLE	1	2.27	2.27		2.26	2.26			
NO	INTERMED. 1	0								
	INTERMED. 2	1	4.02	4.02		64.73	64.73			
	MILITARY	1	10.02	10.02		80.80	80.80			
NO2	IDLE	1	0.27	0.27		0.27	0.27			
	INTERMED. 1	0								
	INTERMED. 2	1	4.05	4.05		53.19	53.19			
SOX	MILITARY	1	4.03	4.03		67.51	67.51			
	IDLE	1	2.00	2.00		1.99	1.99			
	INTERMED. 1	0								
	INTERMED. 2	1	1.75	1.75		11.53	11.53			
	MILITARY	1	1.70	1.70		13.29	13.29			
	IDLE	0								
	INTERMED. 1	0								
	INTERMED. 2	0								
	MILITARY	0								

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-D43-8876

REPORT DATE 03/20/76
 USAF CONTRACT F29681-75-C-0046

ENGINE MODEL : J57-14W

TEST LOCATION : TINKER AFB

ENGINE 12. PAGE 2

*** CATEGORY A TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW #742				SMOKE NUMBER							
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR
IDLE	1	995	995	995			1	7.67	7.67			
INTERMED. 1	1	6667	6667	6667			1	56.92	56.92			
INTERMED. 2	1	7477	7477	7477			1	55.83	55.83			
MILITARY	1	7477	7477	7477			1	55.83	55.83			

ENGINE MODEL : 457-174

TEST LOCATION : TINKER AFB

ENGINE 12, PAGE 1

*** CATEGORY B TESTS ONLY ***

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	# / 100# FUEL			# / HR			STND DEV	* COEF VAR			
			MAX VALUE	MIN VALUE	MEAN VALUE	MAX VALUE	MIN VALUE	MEAN VALUE					
THC	IDLE	3	88.78	61.04	75.28	13.574	18.85	82.21	56.71	70.89	12.988	18.32	
	INTERMED. 1	3	6.48	0.45	3.14	3.084	94.25	3	36.72	17.88	17.477	98.18	
	INTERMED. 2	3	4.94	0.35	2.53	2.384	91.85	3	31.97	2.84	16.54	14.987	98.63
	MILITARY	3	2.28	0.44	1.44	0.938	64.61	3	17.19	3.17	10.88	7.113	65.48
CO	IDLE	3	81.14	73.85	76.44	4.283	5.58	75.1	67.2	72.8	4.22	8.59	
	INTERMED. 1	3	3.64	3.12	3.49	0.323	9.26	3	19.6	17.9	18.7	8.85	
	INTERMED. 2	3	2.66	2.23	2.45	0.215	8.74	3	15.4	15.1	15.5	8.48	
	MILITARY	3	1.89	1.79	1.85	0.849	2.67	3	14.1	13.4	13.8	8.35	
NOX	IDLE	3	2.24	2.12	2.17	0.064	2.97	3	2.28	1.96	2.84	0.136	
	INTERMED. 1	3	7.74	7.37	7.51	0.242	3.23	3	44.64	37.39	48.44	3.761	
	INTERMED. 2	3	9.11	8.32	8.76	0.443	4.64	3	61.91	48.67	55.95	6.717	
	MILITARY	3	18.88	9.44	18.28	0.458	4.56	3	82.99	78.92	76.51	6.885	
NO	IDLE	3	8.57	8.23	8.43	0.188	41.43	3	8.56	8.21	8.41	0.189	
	INTERMED. 1	3	6.29	5.87	6.09	0.218	3.46	3	36.86	38.95	32.76	2.868	
	INTERMED. 2	3	8.82	7.11	7.61	0.461	6.86	3	54.52	41.61	48.63	6.538	
	MILITARY	3	18.67	6.61	9.22	0.761	4.25	3	77.37	61.41	68.76	8.855	
NO2	IDLE	3	1.91	1.62	1.73	0.155	5.94	3	1.76	1.58	1.63	0.138	
	INTERMED. 1	3	1.58	1.27	1.42	0.133	4.33	3	4.58	6.44	7.67	1.187	
	INTERMED. 2	3	1.21	1.44	1.15	0.854	5.23	3	7.87	7.87	7.32	0.219	
	MILITARY	3	1.33	0.73	1.85	0.381	28.79	3	9.51	5.62	7.75	1.971	
SOX	IDLE	4						3	8.94	4.92	8.94	0.432	
	INTERMED. 1	8						3	5.73	5.37	5.37	0.333	
	INTERMED. 2	8						3	6.79	5.84	6.37	0.483	
	MILITARY	8						3	7.67	7.13	7.44	0.279	

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-DB4-#876

REPORT DATE #8/19/76
 USAF CONTRACT F29681-75-C-8846

ENGINE MODEL : J57-19W

TEST LOCATION : TINKER AFH

ENGINE 12, PAGE 2

*** CATEGORY 4 TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	HEADS. FUEL FLOW - #/HR				SMOKE NUMBER							
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAP	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR
IDLE	3	981	920	942	33.6	3.57	3	11.74	14.54	14.94	4.361	3.31
INTERMED. 1	3	5734	5472	5374	333.9	6.21	3	58.04	54.54	57.73	2.875	4.98
INTERMED. 2	3	6795	5954	6373	480.5	7.54	3	61.24	58.84	59.94	1.602	2.81
MILITARY	3	7602	7132	7447	283.5	3.81	3	61.74	59.84	60.73	1.504	2.44

EXHAUST GROSS EMISSION INDICES :

see CATEGORY A TESTS ONLY ***

PARAM	TEST MODE	# / 1000 FUEL				# / HR							
		NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	* COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	* COEF VAR
T4C	IDLE	1	91.88	91.88				1	93.54	93.54			
	INTERMED. 1	2	8.36	8.36				2	2.87	2.87			
	INTERMED. 2	2	8.15	8.15				2	1.25	1.25			
	MIL.CR.PWR. FULL POWER	1	118.24	118.24				1	126.5	126.5			
60	IDLE	1	3.75	3.75				1	21.7	21.7			
	INTERMED. 1	1	1.87	1.87				1	15.8	15.8			
	INTERMED. 2	1	1.54	1.54				1	1.57	1.57			
	MIL.CR.PWR. FULL POWER	1	12.74	12.74				1	73.94	73.94			
N04	IDLE	1	21.55	21.55				1	181.65	181.65			
	INTERMED. 1	1	8.78	8.78				1	8.71	8.71			
	INTERMED. 2	1	18.33	18.33				1	62.84	62.84			
	MIL.CR.PWR. FULL POWER	1	19.19	19.19				1	151.79	151.79			
N02	IDLE	1	1.15	1.15				1	1.17	1.17			
	INTERMED. 1	1	2.64	2.64				1	15.31	15.31			
	INTERMED. 2	1	2.64	2.64				1	28.98	28.98			
	MIL.CR.PWR. FULL POWER	1	1.82	1.82				1	1.82	1.82			
504	IDLE	1	5.88	5.88				1	5.88	5.88			
	INTERMED. 1	1	8.92	8.92				1	8.92	8.92			
	INTERMED. 2	1						1					
	MIL.CR.PWR. FULL POWER	1						1					

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

S/N 1442-0B1-0076

REPORT DATE 08/20/76
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : TF41-A1

TEST LOCATION : TINKER AFM

ENGINE 11, PAGE 2

*** CATEGORY A TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - #/hr				SMOKE NUMBER			
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	MEAN	STND DEV	* COEF VAR
-----	1	1819	1819					
-----	4	5882	3782			7.58		
-----	2	8429	5829			27.92		
-----	1					34.88		

*** CATEGORY B TESTS ONLY ***

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	# / 1000 FUEL			# / HR			* COEF VAR			
			MAX VALUE	MIN VALUE	MEAN	STND DEV	MAX VALUE	MIN VALUE		MEAN	STND DEV	
THC	IDLE	5	107.43	75.33	92.61	11.907	12.86	189.15	76.38	93.19	12.020	12.90
	INTERMED. 1	5	3.66	0.55	1.59	1.211	71.76	18.71	2.91	8.72	6.164	70.59
	INTERMED. 2	5	1.37	0.24	0.97	0.438	44.13	0.02	1.53	5.65	2.487	44.83
	MIL-CR.PWR. FULL POWER	5	3.74 6.25	0.57 0.34	2.24 3.72	1.586 2.144	70.69 57.49	27.03 52.03	4.07 2.01	16.04 31.31	11.341 18.057	70.70 57.68
CO	IDLE	5	122.51	115.47	119.54	2.917	2.44	125.0	117.1	120.3	2.92	0.24
	INTERMED. 1	5	5.14	3.76	4.62	0.553	11.99	26.3	19.4	23.9	2.60	1.89
	INTERMED. 2	5	4.07	2.94	3.57	0.435	12.18	23.4	17.4	20.8	2.32	1.12
	MIL-CR.PWR. FULL POWER	5	2.52 1.94	1.98 1.54	2.32 1.81	0.265 0.164	11.41 9.88	18.2 16.3	13.5 13.1	16.6 15.2	1.95 1.29	1.18 0.95
NOX	IDLE	5	1.58	1.31	1.41	0.075	5.30	1.52	1.28	1.42	0.091	6.44
	INTERMED. 1	5	11.41	7.53	10.33	0.756	7.32	50.12	40.78	53.66	4.528	8.44
	INTERMED. 2	5	13.57	11.54	12.81	0.884	7.24	40.22	66.55	71.10	5.928	8.34
	MIL-CR.PWR. FULL POWER	5	18.21 22.44	15.87 13.51	16.99 21.31	1.010 1.177	5.99 5.52	129.23 198.92	112.79 163.36	121.29 179.11	7.442 11.173	6.14 6.24
NO	IDLE	5	0.66	0.68	0.63	0.024	3.70	0.66	0.61	0.64	0.023	3.57
	INTERMED. 1	5	9.70	7.19	7.79	0.623	8.00	45.05	36.86	40.48	3.783	9.15
	INTERMED. 2	5	10.66	7.14	9.79	0.595	6.00	63.02	52.48	56.96	4.122	7.24
	MIL-CR.PWR. FULL POWER	5	17.11 21.06	13.44 10.11	15.55 20.20	1.121 1.297	7.21 6.42	123.22 181.26	102.95 151.56	110.99 169.78	8.389 11.784	7.56 6.89
NO2	IDLE	5	0.04	0.08	0.77	0.059	7.63	0.05	0.07	0.78	0.068	0.64
	INTERMED. 1	5	2.75	2.19	2.56	0.230	9.30	14.26	11.24	13.19	1.306	9.90
	INTERMED. 2	5	2.91	2.04	2.43	0.365	15.06	17.08	11.78	14.15	2.233	15.79
	MIL-CR.PWR. FULL POWER	5	1.91 2.22	0.74 0.51	1.44 1.11	0.415 0.700	20.75 63.87	13.57 18.79	5.72 4.40	10.30 9.33	2.910 6.017	20.25 60.52
SOX	IDLE	5	0.00	0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.000	0.00
	INTERMED. 1	5	0.00	0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.000	0.00
	INTERMED. 2	5	0.00	0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.000	0.00
	MIL-CR.PWR. FULL POWER	5	0.00	0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.000	0.00

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-089-8870

REPORT DATE 08/19/76
 USAF CONTRACT F296M1-75-C-0046

ENGINE MODEL : TF41-A1

TEST LOCATION : TINKER AFB

ENGINE 11, PAGE 2

*** CATEGORY B TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - #/HR				SMOKE NUMBER							
	NO. ORS	MAX VALUE	MIN VALUE	MEAN	STND DEV	* COEF VAR	NO. ORS	MAX VALUE	MIN VALUE	MEAN	STND DEV	* COEF VAR
IDLE	5	1028	988	1005	16.2	1.61	5	19.00	9.50	13.00	3.750	28.91
INTERMED. 1	5	5268	5116	5198	65.4	1.27	5	40.00	36.00	38.10	1.917	4.77
INTERMED. 2	5	5912	5744	5828	67.6	1.15	5	44.00	33.00	40.20	4.192	10.43
MIL. CRAMP.	5	7201	7497	7139	41.1	0.58	5	50.00	40.00	44.30	3.633	8.20
FULL POWER	5	8685	8269	8483	85.7	1.02	5	51.00	45.00	47.70	2.225	4.56

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TOWING ENGINE EMISSIONS INVESTIGATION
 ENGINE NO. 1 - SUMMARY REPORT

SET 1497-DPR-8876

REPORT DATE 04/20/76
 USAF CONTRACT F29601-75-C-0046

ENGINE NO. 1 - TEST 1-7

TEST LOCATION : TINKER AFB

ENGINE 1A, PAGE 1

SEE CATEGORY A TESTS ONLY ***

EXHAUST GASES EMISSION INDICES :

PARAM	TEST CODE	NO. OPS	MAX VALUE	MIN VALUE	MEAN	STMD DEV	% COEF VAR	# / HR			
								MAX VALUE	MIN VALUE	MEAN	STND DEV
HC	IDLE	1	85.98	45.98				93.87	93.87		
	INTERMED. 1	0									
	INTERMED. 2	1	8.18	6.18				8.72	8.72		
CO	MILITARY	1	8.83	6.83				8.24	8.24		
	IDLE	1	96.88	90.64				183.2	183.2		
	INTERMED. 1	0									
40A	INTERMED. 2	1	1.29	1.29				9.3	9.3		
	MILITARY	1	8.79	6.79				6.8	6.8		
	IDLE	1	1.59	1.59				1.81	1.81		
90	INTERMED. 1	0									
	INTERMED. 2	1	6.63	7.63				69.11	69.11		
	MILITARY	1	11.95	11.95				182.32	182.32		
402	IDLE	1	8.38	8.38				8.32	8.32		
	INTERMED. 1	0									
	INTERMED. 2	1	8.37	8.37				68.89	68.89		
502	MILITARY	1	12.44	12.44				98.18	98.18		
	IDLE	1	1.70	1.70				1.49	1.49		
	INTERMED. 1	0									
50X	INTERMED. 2	1	1.26	1.26				9.82	9.82		
	MILITARY	1	1.44	1.44				12.21	12.21		
	IDLE	0									
	INTERMED. 1	0						1.87	1.87		
	INTERMED. 2	0						7.17	7.17		
	MILITARY	0						3.52	3.52		

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF CONTRACT F29681-75-C-0046

REPORT DATE 08/28/76

SET 1492-000-0076
 USAF TURBINE ENGINE EMISSIONS INVESTIGATION
 ENGINE MODEL SUMMARY REPORT

ENGINE 1A, PAGE 2

TEST LOCATION : TINKER AFB

ENGINE MODEL : TF33-07

*** CATEGORY A TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	NO. OBS		MAX VALUE		MIN VALUE		MEAN		STND DEV		SMOKE NUMBER	
	1	2	1	2	1	2	1	2	1	2	MEAN	STND DEV
IDLE	1	1	1.78	1.78	1.74	1.74	1.74	1.74	0.00	0.00	6.97	6.97
INTERMED. 1	1	1	7174	7174	7179	7179	7179	7179	0.00	0.00	58.93	58.93
INTERMED. 2	1	1	4532	4532	4532	4532	4532	4532	0.00	0.00	47.94	47.94
MILITARY	1	1										

*** CATEGORY B TESTS ONLY ***

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	# / 1000# FUEL			# / HR			* COEF VAR			
			MAX VALUE	MIN VALUE	MEAN	STND DEV	MAX VALUE	MIN VALUE		MEAN	STND DEV	
THC	IDLE	4	83.88	57.86	67.15	11.342	16.89	87.98	60.95	71.73	12.524	17.46
	INTERMED. 1	4	1.81	0.35	0.85	0.652	75.82	11.20	2.18	5.36	4.017	74.87
	INTERMED. 2	4	0.54	0.26	0.42	0.131	30.83	3.82	1.86	3.10	0.918	29.65
	MILITARY	4	0.37	0.17	0.30	0.076	25.65	3.23	1.64	2.60	0.685	26.36
CO	TAKE-OFF	4	0.38	0.16	0.24	0.050	24.68	3.05	1.56	2.50	0.654	26.12
	IDLE	4	93.86	87.24	90.67	2.846	3.22	100.00	88.4	95.8	5.34	0.56
	INTERMED. 1	4	2.42	1.35	1.99	0.478	24.07	15.00	8.6	12.4	2.04	2.29
	INTERMED. 2	4	1.47	0.97	1.24	0.219	17.72	10.4	7.0	1.63	1.81	1.81
NOx	MILITARY	4	0.94	0.50	0.80	0.107	13.39	8.4	5.9	7.0	0.83	1.47
	TAKE-OFF	4	0.77	0.54	0.66	0.103	16.75	8.0	5.5	6.3	1.15	1.92
	IDLE	4	1.96	1.64	1.82	0.112	6.17	2.10	1.81	1.94	0.120	6.20
	INTERMED. 1	4	0.82	0.81	0.81	0.057	10.87	56.15	42.37	49.47	5.726	11.58
NO2	INTERMED. 2	4	10.14	0.25	9.13	0.000	8.85	73.22	63.20	66.47	4.641	6.98
	MILITARY	4	12.40	7.62	11.22	1.230	10.99	100.34	85.90	98.17	9.477	9.65
	TAKE-OFF	4	15.29	11.47	13.74	1.800	13.16	157.99	119.57	140.42	18.251	13.00
	IDLE	4	0.62	0.30	0.43	0.137	32.15	0.70	0.32	0.46	0.166	36.16
NO2	INTERMED. 1	4	0.12	0.03	0.07	0.015	19.15	51.71	31.33	43.14	8.546	19.81
	INTERMED. 2	4	9.42	5.21	8.05	1.351	16.78	50.01	47.50	56.49	8.402	14.36
	MILITARY	4	11.67	6.36	9.90	1.864	18.67	101.27	65.76	87.26	15.223	17.45
	TAKE-OFF	4	15.07	9.03	12.52	2.675	21.21	152.46	94.00	127.00	25.483	20.72
SOx	IDLE	4	1.66	1.07	1.39	0.247	17.74	1.70	1.21	1.40	0.244	16.49
	INTERMED. 1	4	1.77	0.60	1.01	0.515	51.03	11.04	4.30	6.32	3.191	50.47
	INTERMED. 2	4	2.04	0.72	1.05	0.542	59.44	15.62	5.21	7.98	5.100	63.87
	MILITARY	4	2.26	0.81	1.24	0.685	55.24	20.14	7.07	10.91	6.100	56.70
SOx	TAKE-OFF	4	2.46	0.83	1.23	0.990	81.30	25.57	0.30	12.62	10.394	82.35
	IDLE	4	1.00	0.50	0.75	0.100	10.00	1.00	1.00	1.23	0.370	30.57
	INTERMED. 1	4	0.95	0.45	0.70	0.100	10.00	9.95	6.14	7.20	1.835	25.40
	INTERMED. 2	4	12.25	7.00	9.43	2.540	30.20	12.25	7.00	8.43	2.540	30.20
MILITARY	MILITARY	4	14.28	8.00	10.89	3.790	27.72	14.28	8.00	10.89	3.790	27.72
	TAKE-OFF	4	15.64	10.00	11.77	3.240	27.57	15.64	10.00	11.77	3.240	27.57

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-048-0876

REPORT DATE 08/19/76
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : IF33-P7

TEST LOCATION : TINKER AFB

ENGINE 10, PAGE 2

*** CATEGORY B TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - #/HR					SMOKE NUMBER						
	NO. OPS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR	NO. OPS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR
IDLE	4	1124	1413	1058	47.3	4.43	4	15.00	6.00	9.50	4.041	42.54
INTERMED. 1	4	6367	6185	6273	82.6	1.32	4	51.00	42.00	48.00	4.243	8.54
INTERMED. 2	4	7562	7042	7290	263.1	3.61	4	52.00	48.00	47.63	5.250	11.02
MILITARY	4	4233	8610	8757	142.3	1.62	4	51.00	48.00	47.00	5.228	11.12
TAKE-OFF	4	1447	1015	1023	179.3	1.75	4	51.00	39.00	43.92	6.055	13.55

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SFT 1492-004-8976

REPORT DATE 08/20/76
 CONTRACT F296H1-75-C-0046

ENGINE MODEL 1492-17

ENGINE 9, PAGE 1

TEST LOCATION : HAPER AFB

*** CATEGORY A TESTS ONLY ***

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	n / 14.00 F PL			# / HR		
			MAX VALUE	MEAN	STND DEV	MAX VALUE	MEAN	STND DEV
THC	IDL	1	94.34			140.54	140.50	
	INTERMED.	3	9.11	0.11		1.13	1.13	
	INTERMED.	1	6.18	6.18		1.28	1.28	
	MILITARY	4	4.19	0.19		8.94	8.94	
CO	MAX A/F	1	46.89	46.89		128.7	128.7	
	IDL	1	1.89	1.89		28.2	28.2	
	INTERMED.	1	1.29	1.29		16.1	16.1	
	MILITARY	1	18.95	18.95		633.5	633.5	
NOX	MAX A/F	1	2.31	2.31		3.45	3.45	
	IDL	1	14.61	14.61		113.56	113.56	
	INTERMED.	1	12.63	12.63		158.19	158.19	
	MILITARY	1	5.22	5.22		242.18	242.18	
NO	MAX A/F	1	2.61	2.61		1.82	1.82	
	IDL	1	9.78	9.78		144.46	144.46	
	INTERMED.	1	11.22	11.22		148.45	148.45	
	MILITARY	1	3.27	3.27		179.43	179.43	
MO2	MAX A/F	1	1.63	1.63		2.43	2.43	
	IDL	1	4.41	4.41		9.88	9.88	
	INTERMED.	1	1.02	1.02		17.73	17.73	
	MILITARY	1	1.33	1.33		62.67	62.67	
SOX	MAX A/F	1	1.33	1.33		2.44	2.44	
	IDL	1	15.81	15.81		15.81	15.81	
	INTERMED.	1	17.51	17.51		17.51	17.51	
	MILITARY	1	50.85	50.85		50.85	50.85	

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-004-2574

REPORT DATE 08/20/76
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : 075-17

TEST LOCATION : FINKER 2-4

ENGINE 9. PAGE 2

*** CATEGORY A TESTS ONLY ***

MEASURED FUEL FLOW N SMOKE NUMBER :

TEST MODE	NO. OBS	MEAS. FUEL FLOW - lb/hr		STND DEV		* COEF VAR	SMOKE NUMBER		* COEF VAR
		MAX VALUE	MIN VALUE	MEAN	STND DEV		MEAN	STND DEV	
TOLE	1	1498	1498				14.58	14.58	
INTERMED. 1	4	14731	10731				53.25	53.25	
INTERMED. 2	1	12522	12522				53.58	53.58	
MILITARY	4						28.33	28.33	
MAX AVG	1	46375	46375						

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TOWHNE ENGINE EMISSIONS INVESTIGATION
 ENGINE MODEL SUMMARY REPORT

SET 1492-0004-0076

REPORT DATE 08/20/76
 USAF CONTRACT F29601-75-C-0066

ENGINE MODEL : 375-017

TEST LOCATION : LINCOLN AFB

ENGINE : 9, PAGE 1

*** CATEGORY B TESTS ONLY ***

EXHAUST MASS EMISSION INDICES :

PAPAM	TEST MODE	NO. OBS	# / 100# FUEL			# / HR							
			MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR
THC	IDLE	2	76.77	66.94	71.85	6.951	9.67	2	113.54	145.17	189.35	5.914	5.41
	INTERMED. 1	2	2.45	0.39	0.92	0.044	11.65	2	3.04	3.25	3.44	0.276	8.00
	MILITARY	2	3.25	0.17	0.19	0.035	16.13	2	2.33	1.71	2.02	0.438	21.70
CO	IDLE	2	99.75	82.27	96.01	5.249	5.15	2	132.7	129.3	131.0	2.40	0.18
	INTERMED. 1	2	2.91	2.81	2.86	0.071	2.47	2	23.2	23.2	23.2	0.00	0.00
	MILITARY	2	1.42	1.38	1.44	0.029	2.02	2	19.4	19.0	19.2	0.28	0.15
NOx	IDLE	2	2.35	2.25	2.30	0.078	3.37	2	3.53	3.49	3.51	0.028	0.81
	INTERMED. 1	2	7.93	7.43	7.68	0.354	4.50	2	65.99	59.20	62.34	4.448	7.13
	MILITARY	2	9.77	9.22	9.49	0.340	4.10	2	103.52	95.13	96.37	5.003	6.04
NO	IDLE	2	0.98	0.40	0.60	0.260	2.41	2	141.72	135.75	138.73	4.221	3.04
	INTERMED. 1	2	5.60	5.40	5.50	0.177	3.18	2	1.18	0.63	0.98	0.389	42.97
	MILITARY	2	7.14	6.94	7.05	0.113	1.64	2	46.44	43.28	45.11	2.588	5.74
NO2	IDLE	2	0.47	0.26	0.36	0.103	1.59	2	118.28	114.73	116.50	2.652	3.59
	INTERMED. 1	2	1.07	1.06	1.07	0.199	11.55	2	2.70	2.31	2.64	0.417	15.02
	MILITARY	2	2.25	2.08	2.13	0.177	9.32	2	18.56	15.92	17.24	1.867	10.83
SOx	IDLE	2	1.88	1.78	1.79	0.127	7.11	2	27.09	23.15	25.52	3.352	13.13
	INTERMED. 1	2	2.63	2.24	2.43	0.276	11.33	2	2.04	21.02	22.23	1.711	7.70
	MILITARY	2	1.88	1.78	1.79	0.127	7.11	2	23.94	21.02	22.23	1.711	7.70

REPORT DATE #8/28/76
 USAF CONTRACT F29681-75-C-0046

SFT 1492-009-8876

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

ENGINE 9. PAGE 2

TEST LOCATION : TUGER AFB

ENGINE MODEL : J75-P17

*** CATEGORY 8 TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAN FUEL FLOW - gph				SMOKE NUMBER			
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	NO. OBS	MAX VALUE	MIN VALUE	MEAN
IDLE	2	1571	1679	1925	2	15.04	13.58	14.25
INTERMED. 1	2	4261	7967	8114	2	49.58	43.18	48.88
INTERMED. 2	2	1862	1814	1858	2	68.88	47.88	53.58
MILITARY	2	12874	12388	12441	2	58.58	49.88	49.75

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 2245 TURNING ENGINE EMISSIONS TECHNOLOGY
 ENGINE MODEL SUMMARY REPORT

SFT 1492-006-0576

USAF CONTRACT F29681-75-C-0046
 REPORT DATE 4/19/76

ENGINE MODEL : 275-194

TEST LOCATION : FINEK 463

ENGINE : 8, PAGE 1

FOR CATEGORY B TESTS ONLY ***

EXHAUST MASS EMISSIONS TOPICES :

PARAM	TEST MODE	NO. OFS	MAX VALUE	MIN VALUE	MEAN	STND DEV	* COEFF VAR	NO. OFS	MAX VALUE	MIN VALUE	MEAN	STND DEV	* COEFF VAR
THC	IDLE	3	54.21	28.43	33.15	14.854	36.484	3	45.43	46.84	68.29	21.887	36.17
	INTERMED. 1	3	4.74	4.34	4.32	4.154	31.44	3	6.54	3.29	4.54	1.748	38.47
	MILITARY	3	4.42	4.23	4.31	4.494	31.77	3	5.11	2.74	3.71	1.254	33.66
CO	IDLE	3	67.66	34.45	62.22	7.453	11.42	3	14.43	64.6	98.4	4.89	4.82
	INTERMED. 1	3	3.66	3.89	3.24	4.255	7.76	3	29.4	27.9	28.3	8.54	8.21
	MILITARY	3	1.64	1.66	1.66	4.214	11.24	3	25.1	24.4	22.2	2.61	1.17
NOX	IDLE	3	2.54	2.48	2.55	4.854	2.49	3	4.24	3.41	4.85	4.211	5.22
	INTERMED. 1	3	6.44	6.44	5.77	3.243	3.56	3	64.34	58.45	54.61	6.914	11.88
	MILITARY	3	14.81	14.16	14.44	4.344	3.44	3	114.15	143.42	146.76	3.365	3.15
NO	IDLE	3	4.51	4.37	4.44	4.441	17.44	3	4.45	4.56	4.73	4.134	18.91
	INTERMED. 1	3	5.21	4.79	5.14	4.354	7.42	3	51.71	37.58	44.96	7.886	15.76
	MILITARY	3	7.88	6.94	7.41	4.435	5.47	3	44.34	44.53	44.45	5.163	5.84
NO2	IDLE	3	2.11	2.44	2.44	4.417	4.44	3	3.44	3.17	3.31	4.135	4.44
	INTERMED. 1	3	1.71	1.36	1.34	3.243	12.42	3	14.44	12.58	13.45	1.136	8.32
	MILITARY	3	1.34	1.34	1.34	4.244	13.41	3	24.14	15.44	14.34	2.224	12.18
SOX	IDLE	4	1.14	4.57	4.44	4.324	34.61	3	14.42	7.85	12.64	4.262	33.73
	INTERMED. 1	4	2.44	2.44	2.44	2.44	2.44	3	2.44	2.44	2.44	4.111	4.37
	MILITARY	4	1.74	1.74	1.74	1.74	1.74	3	15.44	12.55	13.42	1.227	4.44

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SYT 1492-004-0876

REPORT DATE 08/19/76
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : J75-19*

TEST LOCATION : TINKER AFB

ENGINE # : PAGE 2

*** CATEGORY # TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	HEAD FUEL FLOW - #/HR				SMOKE NUMBER							
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STNO DEV	COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STNO DEV	COEF VAR
IDLE	3	1007	1528	1004	68.7	4.35	3	11.44	14.00	14.67	4.577	5.91
INTERMED. 1	3	4305	7451	8644	762.4	4.89	3	47.50	45.80	47.88	2.291	4.55
INTERMED. 2	3	12897	11748	11932	287.4	1.73	3	52.00	58.80	51.88	1.008	1.96
MILITARY	3	13747	13098	13606	139.7	0.75	2	53.00	50.00	51.50	2.121	4.12

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF ENGINE EMISSIONS INVENTORY
 ENGINE MODEL Summary report

SET 1422-0044-0076

USAF CONTRACT F296A1-75-C-0046

ENGINE MODEL: F105-03

TEST LOCATION: HOPER 304

ENGINE 7, PAGE 1

NOT CATEGORY A TESTS ONLY 000

EXHAUST GROSS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	# / 1000 FUEL			# / HR			STND DEV	# COEF VAR
			MAX VALUE	MIN VALUE	MEAN	MAX VALUE	MIN VALUE	MEAN		
TMC	INTERMED. 1	1	142.93	142.93		142.18	142.18			
	INTERMED. 2	1	4.73	4.73		4.73	4.73			
	MILITARY	1	5.56	5.56		5.56	5.56			
CO	IDLE	1	74.7	74.7		74.7	74.7			
	INTERMED. 1	1	17.4	17.4		17.4	17.4			
	MILITARY	1	16.5	16.5		16.5	16.5			
NOx	IDLE	1	2.86	2.86		2.86	2.86			
	INTERMED. 1	1	53.48	53.48		53.48	53.48			
	MILITARY	1	74.57	74.57		74.57	74.57			
NO	IDLE	1	8.59	8.59		8.59	8.59			
	INTERMED. 1	1	42.25	42.25		42.25	42.25			
	MILITARY	1	65.56	65.56		65.56	65.56			
SOx	IDLE	1	1.47	1.47		1.47	1.47			
	INTERMED. 1	1	11.15	11.15		11.15	11.15			
	MILITARY	1	13.81	13.81		13.81	13.81			

SCOTT ENVIRONMENTAL TECHNOLOGY, INC.
 USAF TURBINE ENGINE EMISSIONS LABORATORY
 ENGINE MODEL SUMMARY REPORT

SPT 14-15-JAN-88Z6

REPORT DATE 01/20/76
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : TF33-03

TEST LOCATION : TUSKIG AFB

ENGINE 7, PAGE 2

*** CATEGORY A TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - GPH			SMOKE NUMBER								
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR
IDLE	1	9.38	4.35				1	14.54	14.54			
INTERMED. 1	1	5944	5944				1	54.57	54.57			
INTERMED. 2	1	7375	7375				1	54.54	54.54			

ENGINE MODEL : TF33-P3

TEST LOCATION : TIKEM AFB

ENGINE 7. PA SE 1

*** CATEGORY B TESTS ONLY ***

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	PPM / HOUR FUEL			STND DEV	% COEF VAR	NO. OBS	# / HR			STND DEV	% COEF VAR
			MAX VALUE	MIN VALUE	MEAN				MAX VALUE	MIN VALUE	MEAN		
THC	IDLE	4	128.29	77.54	105.47	22.300	21.14	4	113.92	71.41	94.19	18.731	19.89
	INTERMED. 1	4	1.14	0.84	0.94	0.132	13.24	4	5.68	4.04	5.18	0.486	9.52
	INTERMED. 2	4	0.71	0.41	0.54	0.143	24.57	4	4.53	2.39	3.68	1.031	28.00
	MILITARY	4	0.53	0.26	0.39	0.162	40.95	4	4.71	1.94	2.95	1.217	41.17
CO	TAKE-OFF	4	0.52	0.14	0.33	0.154	45.14	4	6.03	1.28	2.64	1.168	44.28
	IDLE	4	40.46	74.52	34.82	3.924	4.67	4	78.6	72.9	75.2	2.68	0.36
	INTERMED. 1	4	3.98	2.74	3.56	0.531	14.94	4	19.9	15.4	18.1	2.12	1.17
	INTERMED. 2	4	2.73	2.01	2.28	0.333	14.54	4	15.8	12.6	14.3	1.58	1.05
NOx	MILITARY	4	1.07	1.54	1.55	0.164	8.74	4	13.9	11.7	12.3	1.04	0.84
	TAKE-OFF	4	1.77	1.29	1.51	0.228	15.14	4	13.8	10.4	12.0	1.64	1.37
	IDLE	4	1.95	1.68	1.84	0.114	6.14	4	1.73	1.58	1.65	0.109	6.58
	INTERMED. 1	4	7.13	5.66	6.74	0.229	3.37	4	39.38	31.64	34.75	3.349	9.64
VO	INTERMED. 2	4	0.51	1.52	0.85	0.424	5.34	4	54.21	43.54	50.57	4.815	9.52
	MILITARY	4	9.92	3.49	6.47	0.419	4.67	4	76.02	66.67	70.55	4.841	6.44
	TAKE-OFF	4	10.52	7.55	10.10	0.419	4.11	4	64.25	74.84	80.79	4.362	5.40
	IDLE	4	0.78	0.35	0.51	0.146	36.10	4	0.69	0.31	0.46	0.164	35.59
NO2	INTERMED. 1	4	5.34	4.96	5.15	0.228	18.54	4	34.97	21.39	25.55	6.326	24.76
	INTERMED. 2	4	7.07	5.58	6.25	0.562	13.77	4	44.14	31.86	39.39	6.704	17.02
	MILITARY	4	9.44	7.52	8.47	1.027	13.05	4	58.74	49.34	56.10	8.979	16.01
	TAKE-OFF	4	9.45	7.58	8.14	0.892	10.95	4	75.42	58.57	64.61	7.428	11.49
SOx	IDLE	4	1.68	1.07	1.32	0.225	16.99	4	1.42	0.95	1.19	0.205	17.30
	INTERMED. 1	4	2.24	0.84	1.43	0.607	37.60	4	11.54	4.91	9.28	3.258	35.39
	INTERMED. 2	4	2.28	0.76	1.17	0.646	38.81	4	14.52	4.92	11.17	4.334	38.78
	MILITARY	4	2.55	0.92	1.45	0.644	35.75	4	17.55	7.08	14.45	4.957	34.34
SO2	TAKE-OFF	4	2.67	1.06	2.04	0.695	34.11	4	21.57	8.43	16.18	5.606	34.55
	IDLE	4	0.68	0.47	0.57	0.146	36.10	4	1.42	0.95	1.19	0.205	17.30
	INTERMED. 1	4	2.24	0.84	1.43	0.607	37.60	4	11.54	4.91	9.28	3.258	35.39
	INTERMED. 2	4	2.28	0.76	1.17	0.646	38.81	4	14.52	4.92	11.17	4.334	38.78
SO3	MILITARY	4	2.55	0.92	1.45	0.644	35.75	4	17.55	7.08	14.45	4.957	34.34
	TAKE-OFF	4	2.67	1.06	2.04	0.695	34.11	4	21.57	8.43	16.18	5.606	34.55
	IDLE	4	0.68	0.47	0.57	0.146	36.10	4	1.42	0.95	1.19	0.205	17.30
	INTERMED. 1	4	2.24	0.84	1.43	0.607	37.60	4	11.54	4.91	9.28	3.258	35.39
SO4	INTERMED. 2	4	2.28	0.76	1.17	0.646	38.81	4	14.52	4.92	11.17	4.334	38.78
	MILITARY	4	2.55	0.92	1.45	0.644	35.75	4	17.55	7.08	14.45	4.957	34.34
	TAKE-OFF	4	2.67	1.06	2.04	0.695	34.11	4	21.57	8.43	16.18	5.606	34.55
	IDLE	4	0.68	0.47	0.57	0.146	36.10	4	1.42	0.95	1.19	0.205	17.30
SO5	INTERMED. 1	4	2.24	0.84	1.43	0.607	37.60	4	11.54	4.91	9.28	3.258	35.39
	INTERMED. 2	4	2.28	0.76	1.17	0.646	38.81	4	14.52	4.92	11.17	4.334	38.78
	MILITARY	4	2.55	0.92	1.45	0.644	35.75	4	17.55	7.08	14.45	4.957	34.34
	TAKE-OFF	4	2.67	1.06	2.04	0.695	34.11	4	21.57	8.43	16.18	5.606	34.55

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-DHR-8876

REPORT DATE 08/19/76
 USAF CONTRACT F29681-75-C-0046

ENGINE MODEL : TF33-P3

TEST LOCATION : TINKER AFB

ENGINE 7, PAGE 2

*** CATEGORY H TESTS ONLY ***

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - #/HR				SMOKE NUMBER							
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	* COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	* COEF VAR
IDLE	4	921	884	895	17.7	1.92	4	18.58	18.58	15.88	3.894	25.76
INTERMED. 1	4	5528	4758	5112	332.4	5.49	4	58.58	53.88	57.88	3.544	6.12
INTERMED. 2	4	6588	5791	6275	327.1	5.21	4	61.58	51.88	56.88	5.282	9.15
MILITARY	4	7662	7213	7441	184.7	2.48	4	52.88	51.88	56.88	5.839	8.86
TAKE-OFF	4	8881	7881	7433	119.2	1.58	4	62.88	54.58	58.13	3.924	6.75

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SFI 1492-009-1276

REPORT DATE 01/16/77
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : F10C-P4100

TEST LOCATION : LANGLEY AFB

ENGINE 1B, PAGE 1

***** CATEGORY A TESTS ONLY *****

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	R / 1000R FUEL				STD DEV	± COEF VAR	R / HR				STD DEV	± COEF VAR
			MAX VALUE	MIN VALUE	MEAN	NO. OBS			MAX VALUE	MIN VALUE	MEAN	STD DEV		
THC	IDLE	2	2.95	2.74	2.84	0.148	5.22	4.10	3.96	4.03	0.099	2.46		
	INTERMED. 1	0												
	INTERMED. 2	3	0.16	0.02	0.08	0.074	96.14	0.86	0.06	0.37	0.427	114.44		
CO	MILITARY	2	0.56	0.33	0.49	0.233	119.66	3.68	0.30	1.99	2.390	120.10		
	IDLE	2	24.69	23.40	24.04	0.912	5.79	34.3	33.6	34.0	0.35	0.10		
	INTERMED. 1	0												
NOX	INTERMED. 2	3	2.26	1.13	1.77	0.581	32.77	7.7	5.9	7.0	0.99	1.40		
	MILITARY	2	0.93	0.85	0.89	0.057	6.36	9.5	8.6	9.0	0.64	0.70		
	IDLE	2	3.37	3.30	3.33	0.049	1.48	4.87	4.59	4.73	0.198	4.19		
NO	INTERMED. 1	0												
	INTERMED. 2	3	11.61	7.47	9.22	2.289	24.82	61.99	24.90	40.12	19.419	48.40		
	MILITARY	2	7.87	26.51	26.89	0.255	0.95	276.79	273.42	273.60	4.504	1.65		
NO2	IDLE	2	1.41	1.33	1.37	0.057	4.13	2.03	1.85	1.94	0.127	6.56		
	INTERMED. 1	0												
	INTERMED. 2	3	9.96	9.15	7.57	2.084	27.55	52.50	20.51	33.04	16.930	51.24		
SOX	MILITARY	2	22.81	22.50	22.68	0.255	1.12	233.17	231.73	232.45	1.018	0.44		
	IDLE	2	1.97	1.96	1.96	0.007	0.16	2.84	2.74	2.79	0.071	2.53		
	INTERMED. 1	0												
SO2	INTERMED. 2	3	1.94	1.32	1.65	0.287	17.59	9.69	4.39	7.06	2.651	37.44		
	MILITARY	2	4.37	3.65	4.01	0.509	12.70	45.06	37.25	41.15	5.523	13.42		
	IDLE	2	2.60	2.50	2.55	0.071	2.77	2.60	2.50	2.55	0.071	2.77		
SO2	INTERMED. 1	0												
	INTERMED. 2	0												
	MILITARY	0												

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SIT 1492-D09-1276

USAF CONTRACT F29601-75-C-0046
 REPORT DATE 01/18/77

ENGINE MODEL : F1JG-PW100

TEST LOCATION : LANGLEY AFB

ENGINE 16, PAGE 2

***** CATEGORY A TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - R/HR				SMOKE NUMBER							
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR
IDLE	2	1445	1390	1418	38.5	2.74	1	4.80	4.80			
INTERMED. 1	3	5250	3333	4193	973.7	23.22	1	23.92	23.92			
INTERMED. 2	2	10300	10200	10250	76.7	0.69	1	26.84	26.84			
MILITARY												

***** CATEGORY 3 TESTS ONLY *****

EXHAUST MASS EMISSION INDICES :

PARAM	TEST CODE	NO. OAS	MAX VALUE	MIN VALUE	MEAN	STND DEV	* COEF VAP	# / HR			* COEF VAR	
								NO. OAS	MAX VALUE	MIN VALUE		MEAN
THC	IDLE	5	5.16	2.03	3.64	1.686	45.81	7.32	2.84	5.83	1.941	39.57
	INTERMED. 1	5	4.44	1.13	2.29	1.115	38.47	1.47	0.42	0.96	0.386	40.01
	INTERMED. 2	5	3.37	0.81	1.17	0.137	18.55	1.72	0.43	0.83	0.718	41.54
CO	MILITARY	5	3.24	0.84	2.06	0.892	109.89	2.87	0.84	0.84	0.896	106.57
	IDLE	5	30.36	17.51	24.37	4.211	17.26	34.6	29.3	33.9	3.92	1.16
	INTERMED. 1	5	3.33	1.63	2.44	0.685	26.36	12.8	5.3	8.2	1.96	2.44
NOx	INTERMED. 2	5	1.17	0.02	1.05	0.894	9.23	6.3	4.6	5.5	0.54	0.99
	MILITARY	5	8.96	4.63	6.98	0.125	15.52	9.3	6.6	8.3	1.89	1.32
	IDLE	5	3.54	3.21	3.35	0.162	5.84	5.47	3.89	4.74	0.561	11.93
NOx	INTERMED. 1	5	7.84	6.55	6.74	0.217	3.23	22.74	21.33	22.26	4.684	2.73
	INTERMED. 2	5	12.21	10.45	11.22	0.749	6.96	57.15	48.24	59.27	4.976	11.77
	MILITARY	5	24.44	23.46	24.66	0.776	17.41	323.45	232.48	277.74	41.774	15.84
SOx	IDLE	5	1.61	1.05	1.44	0.389	24.92	2.72	1.26	2.84	4.553	27.15
	INTERMED. 1	5	6.15	5.45	5.75	0.284	3.44	24.84	18.44	19.51	4.641	3.23
	INTERMED. 2	5	12.43	9.89	10.97	0.773	7.92	64.13	42.26	52.74	6.558	12.43
SOx	MILITARY	5	26.61	26.47	26.54	2.624	11.22	284.23	282.49	243.67	34.177	15.67
	IDLE	5	2.17	1.77	1.92	0.166	0.49	2.43	2.53	2.67	4.114	4.14
	INTERMED. 1	5	4.45	4.68	4.66	0.144	12.64	3.17	2.27	2.74	2.334	12.14
SOx	INTERMED. 2	5	1.44	1.07	1.25	0.171	13.73	4.82	5.25	6.57	1.449	15.47
	MILITARY	5	3.66	2.81	3.27	0.331	10.13	38.42	28.66	36.82	4.835	14.21
	IDLE	4	2.61	1.92	2.41	0.288	11.45	2.61	1.92	2.41	4.288	11.45
SOx	INTERMED. 1	4	5.64	5.24	5.44	0.445	7.14	5.64	5.24	5.64	0.445	7.14
	INTERMED. 2	4	9.71	8.39	9.05	0.623	5.83	9.71	8.39	9.05	0.623	5.83
	MILITARY	4	24.52	16.34	17.83	1.575	3.43	24.52	16.34	17.83	1.575	3.43

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TORRENT ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SFT 1492-D10-1276

REPORT DATE 12/15/76
 USAF CONTRACT F29661-75-C-0046

ENGINE MODEL : F105-P12X

TEST LOCATION : LANGLEY AFB

ENGINE I.D. PAGE 2

***** CATEGORY B TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST CODE	MEAS. FUEL FLOW - #/HR				SMOKE NUMBER						
	NO. OBS	MAX VALUE	MIN VALUE	STND DEV	% COEFF VAR	NO. OBS	MAX VALUE	MIN VALUE	STND DEV	% COEFF VAR	
F105	5	1534	128	117.5	4.34	4	24.24	4.88	12.17	6.512	54.55
INTERMED. 1	5	3359	3250	44.7	1.36	4	22.84	16.54	19.15	3.443	17.74
INTERMED. 2	5	5584	4864	277.5	5.27	4	35.54	28.28	31.92	2.981	19.34
MILITARY	5	11384	9644	1834.6	6.83	4	45.74	32.58	34.54	1.388	4.82

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-D14-0177

REPORT DATE 02/08/77
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : TF34-100

TEST LOCATION : G.E. LYNN

ENGINE 20, PAGE 1

***** CATEGORY A TESTS ONLY *****

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	# / 1000R FUEL				# / HR							
		NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR
THC	IDLE	1	29.09	29.09				1	11.20	11.20			
	INTERMED. 1	0						0					
	APPROACH	1	0.47	0.47				1	0.43	0.43			
	CRUISE	1	0.08	0.08				1	0.12	0.12			
	MAX.CONT.PWR	1	0.05	0.05				1	0.12	0.12			
CO	TAKE-OFF	0						0					
	MAX.REDLINE	1	0.03	0.03				1	0.12	0.12			
	IDLE	1	104.36	104.36				1	40.2	40.2			
	INTERMED. 1	0						0					
	APPROACH	1	11.96	11.96				1	11.0	11.0			
NOx	CRUISE	1	3.62	3.62				1	5.4	5.4			
	MAX.CONT.PWR	1	2.33	2.33				1	5.7	5.7			
	TAKE-OFF	0						0					
	MAX.REDLINE	1	1.92	1.92				1	6.9	6.9			
	IDLE	1	2.01	2.01				1	0.77	0.77			
NO2	INTERMED. 1	0						0					
	APPROACH	1	5.40	5.40				1	4.95	4.95			
	CRUISE	1	7.24	7.24				1	10.85	10.85			
	MAX.CONT.PWR	1	9.75	9.75				1	23.84	23.84			
	TAKE-OFF	0						0					
SOx	MAX.REDLINE	1	11.43	11.43				1	41.20	41.20			
	IDLE	1	0.08	0.08				1	0.03	0.03			
	INTERMED. 1	0						0					
	APPROACH	1	3.78	3.78				1	3.47	3.47			
	CRUISE	1	5.78	5.78				1	8.67	8.67			
SUX	MAX.CONT.PWR	1	8.02	8.02				1	19.60	19.60			
	TAKE-OFF	0						0					
	MAX.REDLINE	1	9.53	9.53				1	34.35	34.35			
	IDLE	1	1.93	1.93				1	0.74	0.74			
	INTERMED. 1	0						0					
SUX	APPROACH	1	1.61	1.61				1	1.48	1.48			
	CRUISE	1	1.45	1.45				1	2.18	2.18			
	MAX.CONT.PWR	1	1.73	1.73				1	4.24	4.24			
	TAKE-OFF	0						0					
	MAX.REDLINE	1	1.90	1.90				1	6.85	6.85			
IDLE	0						0						
								1	0.46	0.46			

0	1.10	1.10
1	1.80	1.80
1	2.93	2.93
0	4.32	4.32

INTERMED.	1	0
APPROACH	0	0
CRUISE	0	0
MAX. CONT. P-R	0	0
TAKE-OFF	0	0
MAX. REDLINE	0	0

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-014-0177

REPORT DATE 02/08/77
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : TF34-100

TEST LOCATION : G.E. LYNN

ENGINE 20, PAGE 2

***** CATEGORY A TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - #/HR				SMOKE NUMBER							
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR
IDLE	1	385	385				1	3.67	3.67			
INTERMED. 1	0						0					
APPROACH	1	917	917				1	1.79	1.79			
CRUISE	1	1499	1499				1	2.25	2.25			
MAX. CONT. PWR	1	2445	2445				1	9.79	9.79			
TAKE-OFF	0						0					
MAX. REDLINE	1	3606	3606				1	20.21	20.21			

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-D14-D177

REPORT DATE 02/08/77
 USAF CONTRACT F29601-75-C-0046

ENGINE 20, PAGE 2

ENGINE MODEL : TF34-100

TEST LOCATION : G.E. LYNN

***** CATEGORY C TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - #/HR				SMOKE NUMBER							
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	COEF VAR
IDLE	1	381	381				1	2.88	2.88			
INTERMED.)	1	438	438				1	1.13	1.13			
APPROACH	1	918	918				1	0.50	0.50			
CRUISE	1	1491	1491				1	0.25	0.25			
MAX. CONT. PWR	1	2569	2569				1	7.75	7.75			
TAKE-OFF	1	2836	2836				1	9.50	9.50			
MAX. REDLINE	1	3232	3232				1	14.63	14.63			

***** CATEGORY C TESTS ONLY *****

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	P / 100CF FUEL			P / HR		
			MAX VALUE	MIN VALUE	MEAN	STND DEV	MEAN	STND DEV
THC	IDLE	1	28.04	28.04		10.68	10.68	
	INTERMED. 1	1	16.82	16.82		7.37	7.37	
	APPROACH	1	1.06	1.06		0.97	0.97	
	CRUISE	1	0.31	0.31		0.46	0.46	
	MAX. CONT. PWR	1	0.26	0.26		0.67	0.67	
	TAKE-OFF	1	0.10	0.10		0.28	0.28	
MAX. REDLINE	1	0.08	0.08		0.27	0.27		
CO	IDLE	1	107.24	107.24		40.9	40.9	
	INTERMED. 1	1	80.98	80.98		35.5	35.5	
	APPROACH	1	16.63	16.63		15.3	15.3	
	CRUISE	1	4.58	4.58		6.8	6.8	
	MAX. CONT. PWR	1	2.37	2.37		6.1	6.1	
	TAKE-OFF	1	2.18	2.18		6.2	6.2	
MAX. REDLINE	1	1.92	1.92		6.2	6.2		
NOX	IDLE	1	2.15	2.15		0.82	0.82	
	INTERMED. 1	1	2.70	2.70		1.18	1.18	
	APPROACH	1	0.52	0.52		0.99	0.99	
	CRUISE	1	8.32	8.32		12.41	12.41	
	MAX. CONT. PWR	1	10.61	10.61		27.77	27.77	
	TAKE-OFF	1	11.11	11.11		31.50	31.50	
MAX. REDLINE	1	12.04	12.04		38.93	38.93		
NO	IDLE	1	0.09	0.09		0.03	0.03	
	INTERMED. 1	1	0.12	0.12		0.05	0.05	
	APPROACH	1	4.32	4.32		3.97	3.97	
	CRUISE	1	6.64	6.64		9.90	9.90	
	MAX. CONT. PWR	1	8.87	8.87		22.78	22.78	
	TAKE-OFF	1	9.13	9.13		25.89	25.89	
MAX. REDLINE	1	10.07	10.07		32.55	32.55		
NO2	IDLE	1	2.06	2.06		0.79	0.79	
	INTERMED. 1	1	2.58	2.58		1.13	1.13	
	APPROACH	1	2.20	2.20		2.02	2.02	
	CRUISE	1	1.68	1.68		2.50	2.50	
	MAX. CONT. PWR	1	1.95	1.95		5.00	5.00	
	TAKE-OFF	1	1.95	1.95		5.62	5.62	
MAX. REDLINE	1	1.97	1.97		6.38	6.38		
SOX	IDLE	0						

INTERMED.	1	0	1	0.26	0.26
APPROACH	0	0	1	0.55	0.55
CRUISE	0	0	1	0.89	0.89
MAX.CONT.PAR	0	0	1	1.54	1.54
TAKE-OFF	0	0	1	1.70	1.70
MAX.REDLINE	0	0	1	1.94	1.94

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-D14-0177

REPORT DATE 02/08/77
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : TF34-100

TEST LOCATION : G.E. LYNN

ENGINE 20, PAGE 1

***** CATEGORY B TESTS ONLY *****

EXHAUST MASS EMISSION INDICES :

PARAM	TEST MODE	NO. OBS	P / 1000 FUEL			P / HR			STND DEV	COEF VAR
			MAX VALUE	MIN VALUE	MEAN	STND DEV	MEAN VALUE	STND DEV		
TDC	IDLE	5	43.35	24.94	34.34	8.434	17.00	13.32	3.269	24.54
	INTERMED. I	5	23.42	16.03	20.26	2.668	10.80	9.27	1.454	15.68
	APPROACH	5	1.75	0.85	1.18	0.350	1.58	1.04	0.305	28.05
	CRUISE	5	0.41	0.10	0.21	0.118	0.61	0.16	0.176	56.84
	MAX+CONT.P+R	5	0.17	0.04	0.10	0.060	0.45	0.09	0.164	61.69
	TAKE-OFF	5	0.14	0.01	0.06	0.065	0.41	0.04	0.187	100.63
CC	MAX+REDLINE	4	0.07	0.02	0.04	0.024	0.21	0.06	0.071	62.10
	IDLE	5	116.02	101.02	106.62	6.417	44.40	41.4	2.26	0.55
	INTERMED. I	5	82.19	72.62	77.95	4.584	37.7	35.5	1.51	0.42
	APPROACH	5	20.20	14.82	16.29	2.223	18.2	15.0	1.81	1.21
	CRUISE	5	6.67	3.64	4.89	1.230	8.6	7.1	1.41	1.97
	MAX+CONT.P+R	5	2.70	2.07	2.26	0.262	6.9	5.1	0.70	1.21
NGX	TAKE-OFF	5	2.46	1.81	2.07	0.245	6.9	5.9	0.71	1.21
	MAX+REDLINE	4	2.12	1.70	1.93	0.176	7.0	6.3	0.68	1.06
	IDLE	5	2.22	1.94	2.08	0.091	0.85	0.78	0.024	3.57
	INTERMED. I	5	2.82	2.37	2.64	0.170	1.38	1.21	0.122	10.09
	APPROACH	5	6.38	5.24	5.70	0.428	5.86	4.73	0.817	7.93
	CRUISE	5	8.42	7.16	7.65	0.480	12.55	9.44	1.127	10.24
NG	MAX+CONT.P+R	5	11.34	9.77	10.34	0.593	49.14	25.21	1.509	5.67
	TAKE-OFF	5	11.90	10.14	11.00	0.639	33.74	29.27	1.617	5.19
	MAX+REDLINE	4	12.56	11.15	11.86	0.585	40.61	36.96	1.569	4.05
	IDLE	5	0.12	0.09	0.10	0.011	0.05	0.04	0.004	10.65
	INTERMED. I	5	0.18	0.11	0.14	0.029	0.09	0.05	0.017	26.15
	APPROACH	5	4.33	3.21	3.78	0.399	3.98	3.45	0.392	11.25
NG2	CRUISE	5	6.75	5.78	6.06	0.406	10.06	7.50	0.937	10.51
	MAX+CONT.P+R	5	9.35	8.10	8.47	0.514	24.02	21.81	1.324	6.10
	TAKE-OFF	5	9.81	8.40	9.03	0.569	27.81	24.26	1.355	5.30
	MAX+REDLINE	4	10.52	9.31	9.87	0.534	33.99	30.86	1.300	4.03
	IDLE	5	2.11	1.86	1.98	0.087	0.80	0.74	0.024	3.14
	INTERMED. I	5	2.67	2.24	2.50	0.153	1.29	0.96	0.113	9.90
SGX	APPROACH	5	2.05	1.75	1.92	0.121	1.88	1.62	0.098	5.52
	CRUISE	5	1.75	1.58	1.54	0.142	2.68	1.98	0.294	12.51
	MAX+CONT.P+R	5	1.99	1.67	1.87	0.137	5.17	4.43	0.335	6.97
	TAKE-OFF	5	2.20	1.74	1.97	0.162	6.38	5.01	0.368	10.18
	MAX+REDLINE	4	2.16	1.84	1.94	0.140	7.25	6.10	0.541	8.30
	IDLE	0					0.53	0.16	0.32	0.165

INTERMED. I	0							
APPROACH	0							
CRUISE	0							
MAX. CONT. P-R	0							
TAKE-OFF	0							
MAX. REDLINE	0							
	5	0.64	0.20	0.38	0.191	50.56		
	5	1.31	0.36	0.76	0.410	52.82		
	5	2.14	0.51	1.26	0.695	55.25		
	5	3.69	1.02	2.16	1.117	51.71		
	5	4.06	1.12	2.38	1.241	52.05		
	4	4.68	1.94	3.10	1.364	43.92		

SCOTT ENVIRONMENTAL TECHNOLOGY INC.
 USAF TURBINE ENGINE EMISSIONS INVENTORY
 ENGINE MODEL SUMMARY REPORT

SET 1492-014-0177

REPORT DATE 02/08/77
 USAF CONTRACT F29601-75-C-0046

ENGINE MODEL : TS-59-100

TEST LOCATION : G.E. LYNN

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***** CATEGORY B TESTS ONLY *****

MEASURED FUEL FLOW & SMOKE NUMBER :

TEST MODE	MEAS. FUEL FLOW - #/HR					SMOKE NUMBER						
	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR	NO. OBS	MAX VALUE	MIN VALUE	MEAN	STND DEV	% COEF VAR
IDLE	5	395	375	388	7.6	1.96	5	5.75	2.75	3.63	1.298	35.81
INTERMED. 1	5	490	437	457	21.6	4.73	5	2.88	1.63	2.30	0.498	21.60
APPROXACH	5	936	902	922	16.9	1.40	5	2.63	0.13	1.20	0.542	76.24
CRUISE	5	1531	1288	1472	103.9	7.06	5	1.25	0.00	0.68	0.513	75.95
MAX-CONT.PWR	5	2649	2472	2575	72.5	2.83	5	9.25	3.36	6.13	2.559	41.76
TAKE-OFF	5	2900	2764	2836	58.6	2.07	5	16.63	7.50	10.45	3.775	36.16
MAX-REDLINE	4	3347	3179	3268	76.7	2.35	4	24.50	14.88	18.69	4.467	23.90

INITIAL DISTRIBUTION

ADTC/CS	1
DDC/TCA	2
HQ AFSC/DL	1
HQ AFSC/SD	1
HQ USAF/LEEV	1
HQ USAF/SGPA	1
OSAF/MIQ	1
OSAF/OI	1
AFIT/Library	1
AFIT/DE	1
Federal Laboratory Program	1
EPA/ORD	1
USA Chief, R&D/EQ	1
USN Chief, R&D/EQ	1
OEHL/CC	2
AFCEC/DEV	1
USAFSAI1/EDE	2
HQ AFISC	2
AUL/LSE	1
HQ USAFA/Library	1
Det 1 ADTC/TST	1
1 MSEW	1
OUSDR&E	1
USAF Hospital, Wiesbaden	1
USN/NEPSS	1
Naval Air Propulsion Center	1
AMD/CC	1
AMRL/CC	1
USAFESAM/CC	1
USAFESAM/VNL	2
AFGL/CC	1
AFAPL/CC	1
AFAPL/TBC	2
ASD/CC	1
AEDC/CC	1
AEDC/DYR	1
OC-ALC/MA	1
San Antonio ALC/MAEEE	1
San Antonio ALC/MA	1
HQ AFLC/MA	1
HQ AFLC/DE	1
HQ AFLC/SGB	1
Aircraft Env Support Office	1
Federal Aviation Administration	1
Det 1 ADTC/ECA	3
US Army Aviation Systems Command	2
General Electric Company	1
Pratt & Whitney Aircraft Div	1