

RESPONSE TO REQUEST
FOR ADDITIONAL REVIEW

MAINTENANCE
DETROIT METROPOLITAN WAYNE COUNTY AIRPORT

PREPARED FOR
THE JOINT LEGISLATIVE SELECT COMMITTEE
ON THE WAYNE COUNTY DETROIT METROPOLITAN AIRPORT

December 12, 2000

The Honorable Glenn D. Steil
Michigan Senate
Co-Chairperson, Joint Legislative Select Committee
1020 Farnum Building
Lansing, Michigan
and
The Honorable James L. Koetje
Michigan House of Representatives
Co-Chairperson, Joint Legislative Select Committee
N1093 House Office Building
Lansing, Michigan

Dear Senator Steil and Representative Koetje:

This special report is in response to your June 6, 2000 letter requesting a more detailed review of the Detroit Metropolitan Wayne County Airport (the Airport). This special report contains our responses to specific requests in the general issue area of Airport maintenance.

Specifically, you have asked us if the observations noted in your request were accurate and supported by the material in the preliminary review. Also, you asked us to conduct a more detailed review of the internal control weaknesses identified in the preliminary review and to identify any significant losses that may have occurred at the Airport.

Our procedures were of limited scope. Therefore, our review should not be considered an audit in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States.

We are available to present this special report to the Joint Legislative Select Committee on the Wayne County Detroit Metropolitan Airport upon request. If this is the Committee's desire or if you have any questions or concerns regarding this review, please contact me.

AUDITOR GENERAL

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** All exhibits of the Wayne County Detroit Metropolitan Airport Preliminary Review Reports are available by contacting the Office of the Auditor General in writing and specifying the exact exhibits that you would like to receive. Your written request, with your name and address, must be sent to: The Office of the Auditor General, 201 N. Washington Square, 6th Floor, Lansing, Michigan, 48913.*

OVERVIEW OF AIRPORT MAINTENANCE SUPPLIES

The Detroit Metropolitan Wayne County Airport maintains inventories of maintenance supplies that are stored in inventory cribs located in the power plant, field maintenance, building maintenance, and equipment repair areas.

Maintenance supplies are requisitioned by maintenance personnel to fill work order needs. Replacement supplies are purchased either from the county store or on dollar-limited blanket purchase orders held with local businesses. The county store is a supply warehouse located in the county maintenance yard adjacent to the Airport.

The Airport expended approximately \$4.8 million on maintenance supplies in each of fiscal years 1999-2000 and 1998-99.

SCOPE OF REVIEW

Our procedures were of limited scope. Therefore, our review should not be considered an audit in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States.

We reviewed the existing internal control over the maintenance supply inventories. Also, we selected items from existing maintenance supply inventory records and conducted a physical inventory count of the items.

COMMENTS

Request:

Are the observations noted in the letter from the Joint Legislative Select Committee on the Wayne County Detroit Metropolitan Airport accurate and supported by the material in the preliminary review?

Committee Observations:

In its June 6, 2000 letter, the Committee observed that the Preliminary Review of Maintenance reported that the Airport has 253 maintenance employees, providing

maintenance for areas such as the power plant, the airfield, buildings, and equipment repair. Airport maintenance expenditures for fiscal year 1997-98 totaled \$28.3 million (20% of total Airport expenditures). The report indicates that the Airport did not list maintenance supplies used on nonrecoverable work orders (i.e., requests for maintenance that is the Airport's responsibility) because the Airport ". . . did not consider listing maintenance supplies on nonrecoverable work orders as being cost effective."

The report also indicates that the Airport expended \$3.3 million on maintenance supplies in fiscal year 1997-98. However, the report indicates that the Airport's procedures for recording the receipt and disbursement of maintenance supplies and for conducting annual physical inventories are in draft form and have not been promulgated. Further, the report reveals that the Airport's field maintenance and building maintenance areas did not maintain inventory records. In addition, the power plant, field maintenance, building maintenance, and equipment repair areas did not conduct annual physical inventories.

Procedure:

We reviewed the Committee's letter and compared it with our preliminary report and working papers to determine if the letter was accurate and supported by the preliminary report.

Comment:

The aforementioned observations of the Committee are accurate and supported by the material in the preliminary review.

Request:

Conduct a detailed review to determine whether the internal control weaknesses in the preliminary review resulted in significant losses to the Airport.

Procedure:

We reviewed the existing internal control over maintenance supply inventories.

Comment:

The Airport's internal control over maintenance supplies was weak and, in some cases, nonexistent. For example, our review noted the following internal control weaknesses:

1. The Airport does not maintain inventory records for all maintenance supplies. The power plant and equipment repair areas are the only areas in which inventory

records are kept. The field maintenance and building maintenance areas do not maintain inventory records. The field maintenance and building maintenance areas store items such as carpentry supplies (i.e., tools, plywood, dry wall, ceiling tile, and carpet), fencing, seating, and plumbing and electrical supplies.

2. The field maintenance and building maintenance areas are not staffed by stores clerks. Employees have open access to supplies.
3. Although stores clerks staff the power plant and equipment repair areas, managers, foremen, and supervisors have access to supplies when the stores clerks are absent.
4. There is no separation of duties for the receipt, receipt posting, and disbursement of maintenance supplies in the power plant area. The same stores clerk in the power plant area performs all of the functions of receipting, posting, and disbursing maintenance supplies.
5. The Airport does not monitor nonrecoverable work orders. The Airport does not require that nonrecoverable work orders include the cost of maintenance supplies, which would enable the Airport to monitor the costs of certain maintenance projects.

Also, nonrecoverable work order projects with priority 1 through 3 (1 - immediate attention, 2 - public inconvenience, 3 - normal maintenance) are not approved by supervisory personnel to ensure that only the maintenance supplies needed for a particular project are disbursed to maintenance personnel.

6. The Airport does not conduct periodic physical inventory counts. Physical inventory counts are not conducted in the power plant, field maintenance, building maintenance, and equipment repair areas. However, because inventory records are not maintained for the field maintenance and building maintenance areas, physical inventory counts would be of little value to the Airport.

Maintaining an appropriate level of internal control over inventories safeguards assets by helping to minimize the possibility that errors or irregularities could occur and not be detected in a timely manner.

Procedure:

We tested the accuracy of existing maintenance supplies inventory records in the two areas (power plant and equipment repair) that maintained inventory records (see Exhibits A and B).

Comment:

The balances recorded in the inventory records were generally overstated. For example, we conducted a physical inventory of 51 supply items located in the power plant area (see Exhibit A). Items inventoried consisted of air conditioners, pumps, motors, heaters, parts, and parts assemblies. The total recorded value of the items inventoried was \$30,945. The total value of items counted was \$30,026. The recorded value of the power plant supplies was overstated by \$919 (3%).

We also conducted a physical inventory of 52 supply items located in the equipment repair area (see Exhibit B). Items inventoried consisted of vehicle parts. The total recorded value of the items inventoried was \$20,450. The total value of items counted was \$12,100. The recorded value of the equipment repair supplies was overstated by \$8,350 (69%).

The overstatement of inventory supply records noted in our physical inventory count in the power plant and equipment repair areas could be an indication of unauthorized activity.

Costs for supply items in both areas were not posted on the individual inventory records. Airport staff had to obtain the costs from vendor invoices or catalogs. This process delayed completing our physical inventory of both areas for approximately four weeks.

Inventory records in the field maintenance and building maintenance areas were not maintained. Thus, conducting physical inventories in those areas would have served no purpose. Therefore, we could not determine whether any significant losses occurred in these areas. The lack of any inventory records in the field maintenance and building maintenance areas presents a significant risk for unauthorized activity.

In conclusion, weak internal control over the maintenance supply inventory as described in this review greatly increased the risk of inventory shrinkage.

Airport Response:

The draft report was shared with the Airport on November 20, 2000. The Airport indicated that the report is an accurate portrayal of the Airport's inventory control for the Maintenance Division. However, the Airport felt that the report should also highlight the areas in which the Maintenance Division is moving toward correcting these deficiencies. These areas are highlighted in the Airport's response presented in Exhibit C.

POWER PLANT INVENTORY

Sample Item Number	Part Number	Item Description	On-Hand Recorded	On-Hand Counted	Item Cost	Recorded Value	Actual Value	Difference
1	WAC053	5200 B.T.U./Hr. Air conditioner	13	13	\$ 219	\$ 2,847	\$ 2,847	\$ 0
2	ADU18/ASU18	Air conditioner	1	1	\$1,314	1,314	1,314	0
3	D-9175D-1014	Mondutrol 4 motor actuator	1	1	\$ 427	427	427	0
4	060-81191-060	Actuator lever	2	2	\$ 35	70	70	0
5	189120	Bearing assembly	4	4	\$ 128	512	512	0
6	R-2080-1	Booster	6	6	\$ 52	312	312	0
7	N/A	Large cabinet	1	1	\$ 477	477	477	0
8	N/A	Door halves with lock	2	2	\$ 550	1,100	1,100	0
9	12005	Capacitor	1	1	\$ 4	4	4	0
10	NAB71	Wall case for zone line a.c. units	3	3	\$ 64	191	191	0
11	E5187B	Compressor	2	2	\$ 380	761	761	0
12	V16501	Compressor	1	1	\$ 166	166	166	0
13	NT-10	Warm air limit control	3	3	\$ 79	236	236	0
14	T-9001-1	Fluidic receiver controller	4	1	\$ 230	921	230	(690)
15	C-208-2	Cumulator	1	1	\$ 86	86	86	0
16	D-251-405	Damper motor	1	1	\$ 61	61	61	0
17	A-17229	Drier	2	2	\$ 32	64	64	0
18	MR60-CPO	Plastic drum pump	1	1	\$ 19	19	19	0
19	A-4000-601	Filter air drier	1	1	\$ 172	172	172	0
20	8-140211	1 hp Motor	1	1	\$ 99	99	99	0
21	52	1/15 hp Motor	10	10	\$ 46	460	460	0
22	BG111044	1/2 hp Motor	1	1	\$ 564	564	564	0
23	Euclid Green	Paint	7	7	\$ 35	244	244	0
24	V11HAA-100	Solenoid	31	31	\$ 64	1,984	1,984	0
25	RP670A-1001	Pneumatic relay switch	2	2	\$ 32	63	63	0
26	JC-5361	Test probe	13	13	\$ 13	167	167	0
27	HO6E-36	36" Long thermocoupler	31	31	\$ 5	169	169	0
28	EPT-102-1	12 Volt transducer	10	10	\$ 402	4,016	4,016	0
29	198162EA	Transformer	1	1	\$ 50	50	50	0
30	B-3AR	Trap	5	12	\$ 65	326	783	457
31	F-22	22 psi Valve	3	1	\$ 127	382	127	(255)
32	5051-01	Valve assembly	7	7	\$ 83	581	581	0
33	5454FX	Vibration eliminator	2	2	\$ 31	62	62	0
34	20-150-00	Water gage	5	5	\$ 38	192	192	0
35	T-800-1605	Brass 6 1/2" well	1	1	\$ 25	25	25	0
36	N/A	8" Standard twist wirewheel	4	4	\$ 18	72	72	0
37	AZ22E15D5B	Zone line air conditioner - slide in	2	2	\$ 802	1,605	1,605	0
38	3405-21	Actuator - motor	9	9	\$ 245	2,203	2,203	0
39	875778	Cart parts - motor	3	3	\$ 557	1,671	1,671	0
40	H-3610-1002	Controller - humidity	3	3	\$ 209	627	627	0
41	BLF1A	Cooler - bottled water	1	1	\$ 192	192	192	0
42	AP317	Filter/water - drinking water line	19	19	\$ 21	397	397	0
43	N/A	Gasket - manhole 17" x 13 1/2"	7	6	\$ 26	180	154	(26)
44	MMHD1502TA	Heater - air 1500w	15	14	\$ 35	521	486	(35)
45	11USHS100	Heater - unit heater	4	4	\$ 590	2,360	2,360	0
46	3001AA5097	Heater - exhaust fan	1	1	\$ 580	580	580	0
47	LFP6152	Heater - portable electric	2	1	\$ 129	257	129	(129)
48	APR 10040	Insulation - 48"x35'X1	3	2	\$ 237	710	473	(237)
49	140-0514	Paint - flat black spray can	7	4	\$ 2	11	6	(5)
50	N/A	Praire gold 1 gallon	10	10	\$ 36	360	360	0
51	992238	Regulator - pump	1	1	\$ 75	75	75	0
					Total	<u>\$ 30,945</u>	<u>\$30,026</u>	<u>\$ (919)</u>

N/A = Not available.

EQUIPMENT REPAIR INVENTORY

Sample Item Number	Part Number	Item Description	On-Hand Recorded	On-Hand Counted	Item Cost	Recorded Value	Actual Value	Difference
1	2602428	Motor/salt spreader	5	5	\$ 116	\$ 578	\$ 578	\$ 0
2	3908560	Pulley (alternator) trackless	3	3	\$ 20	60	60	0
3	SA776	Starter motor	3	1	\$ 116	349	116	(233)
4	78DT	Battery	15	5	\$ 67	999	333	(666)
5	A710C	Air filter	6	6	\$ 32	193	193	0
6	AR4518401RX	Pump	4	1	\$ 142	569	142	(427)
7	53008647	Jeep alternator	4	4	\$ 126	504	504	0
8	E7VY19703A	Compressor	1	1	\$ 185	185	185	0
9	56006551	Filter	7	4	\$ 273	1,908	1,090	(818)
10	GR-821	Ford Explorer alternator	0	3	\$ 35	0	104	104
11	RC12LC4	Spark plugs	35	35	\$ 2	59	59	0
12	OGU65LD5	L Door panel (Jeep)	3	0	\$ 335	1,004	0	(1,004)
13	MKD154	Brake pads	2	2	\$ 29	59	59	0
14	472253C1	Switch blower motor	6	1	\$ 5	27	5	(23)
15	52005732	Cap, wheel center	8	5	\$ 6	46	28	(17)
16	5329034	Relay	1	1	\$ 70	70	70	0
17	4762489	Retainer	33	18	\$ 4	125	68	(57)
18	4720006	Jeep blower motor	4	4	\$ 70	282	282	0
19	18828	Pittman arm Chevy van	2	2	\$ 38	75	75	0
20	F37Z10047A200	Console arm Ford Explorer	3	3	\$ 29	86	86	0
21	TA 247	6600 Radiator	1	0	\$ 650	650	0	(650)
22	F77Z19703AB	A/C compressor	1	0	\$ 160	160	0	(160)
23	P801095	Adapter linkage	2	2	\$ 11	23	23	0
24	F5DH19497BA	Air compressor	2	2	\$ 231	462	462	0
25	7127	Alternator	3	0	\$ 150	450	0	(450)
26	4762194	Axle and shaft assembly	2	2	\$ 255	511	511	0
27	HM88649	Bearing (front pinion)	10	11	\$ 17	172	189	17
28	4720006	Blower motor (Jeep)	4	4	\$ 70	282	282	0
29	XL3Z2200AA	Brakes '98 Expedition	4	4	\$ 59	236	236	0
30	E7TZ99439A00A	Bumper assembly	13	14	\$ 2	32	35	2
31	2210W7537	Camshaft, Lf	3	3	\$ 20	61	61	0
32	2310694	Carburetor	3	3	\$ 107	320	320	0
33	KN13060	Compressor	4	4	\$ 204	815	815	0
34	FB59	Crank case	4	5	\$ 1	4	5	1
35	26327	Driveshaft	5	0	\$ 233	1,165	0	(1,165)
36	3967	Fuel pump	4	4	\$ 42	167	167	0
37	4E600	Headlight	3	4	\$ 116	349	465	116
38	TA80665	Hyd motor	4	4	\$ 412	1,647	1,647	0
39	55036473	Jeep a/c	2	0	\$ 197	393	0	(393)
40	F4TZ2140A	Master cylinder & res	2	1	\$ 102	204	102	(102)
41	PF1250	Oil filter	107	78	\$ 3	302	220	(82)
42	MKD477	Pads for Jeep 93 & 95	9	0	\$ 88	790	0	(790)
43	26037450	Pump (fuel pump)	2	0	\$ 339	678	0	(678)
44	F4CZ9C968A	Regulator	18	5	\$ 34	604	168	(436)
45	D447	Rotor	8	8	\$ 3	26	26	0
46	16062	Shaft assembly	1	0	\$ 161	161	0	(161)
47	50844	Shocks	36	0	\$ 24	849	0	(849)
48	1255773	Solenoid	11	19	\$ 106	1,164	2,011	847
49	40956	Splined gear/shaft assembly	2	0	\$ 116	232	0	(232)
50	J81128900	Starter	5	5	\$ 40	198	198	0
51	ETTZ9943A00C	Tailgate bumper	8	10	\$ 2	20	25	5
52	F3TZ8501C	Water pump 5.0 Ford	3	2	\$ 50	149	99	(50)
Total						\$ 20,450	\$ 12,100	\$ (8,350)