

Appendix D

Using Microsoft Access 2000 to Customize T.O.M. Reports

Gecko Microsolutions takes software reports very seriously. We know that in the end a software package is only as good as the reports it produces and questions it can answer. With that in mind, T.O.M. was created with a rich and robust set of management reports. These reports are enhanced by T.O.M.'s powerful searching and sorting options.

While T.O.M. has by far the best field trip reporting in the industry, we wanted to take its already formidable features even further. We found that there was still a need for our customers to take some of T.O.M.'s reports and change them a little to make them "just right." Or really be able to change the layout and look of the trip ticket or invoice.

To help you get the most from T.O.M.'s reporting features, we have included a feature that allows you to change T.O.M. reports or create your own unique reports (using Microsoft Access 2000) and run them in T.O.M. T.O.M. ships with a new custom report library database containing many of T.O.M.'s more popular reports. You can open this custom report library with Access 2000 and modify any of the reports in that library using the powerful Report Writer in Access 2000. You can even create your own new reports in this report library.

When running many of the management reports in T.O.M., you can tell T.O.M. that you want to run one of these reports in the custom report library. The report library ships with the following popular management reports and forms. You can then use Access 2000 to change any of these reports.

- Field Trip 1 Line Report
- Field Trip 2 Line Report
- Field Trip 3 Line Report
- Field Trip 4 Line Report
- Field Trip Report with Employees
- Field Trip Report with Employees New Page per Day
- Field Trip Employees Report 1 Line
- Field Trip Employees Report 2 Line
- Recap Report
- Trip Ticket
- Invoice

An important part of this feature is that these reports are protected when a new version of T.O.M. comes out. You don't have to recreate them each time T.O.M. comes out with a new release. Let's take a look at how this works.

Before You Start...

- You should have a basic understanding of designing reports in Microsoft Access 2000 in order to follow the example in this appendix.
- You should be fully knowledgeable in working with Access 2000 if you decide to customize or create your own reports. If you are not, we strongly suggest you find someone who is before you attempt to modify any T.O.M. reports or create your own reports for use with T.O.M.



- All tables in this database are temporary work tables that T.O.M. replaces when running certain reports.
- The queries located in this database should not be deleted or modified. If they are, some reports will not run correctly.
- The custom report library database is named 'TRIPRPT.MDB' and it is stored on EACH user's P.C. in the same directory that their T.O.M. software is stored. NOTE: If you create a custom report it is only available on your P.C. If you want it available for other users you must copy the TRIPRPT.MDB file to the other P.C.'s.

An Example of Changing an Existing T.O.M. Custom Report

For our example, we will be working with one of T.O.M.'s popular dispatching reports: the 2 Line Field Trip Report. It is a simple report that shows 2 lines of information for a selected list of field trips. In this example, you will learn how to make a simple change by replacing the Grade field with the Fund field of the field trip, as shown in Figure D-1.





5/23/00 9:49:34 PM		PARADISE VALLEY SCHOOL DISTRICT # 69				Page: 1			
FIELD TRIP REPORT									
Trip # / Contact	Dep. Date	Customer / Purpose	Destination / Est. Time	Shtl	Est. Miles	Ret. Date / # of Stud.	LeaveTime / # of Adults	Ret Time/ Grade	Cncl Assgn
10950 MINDY KENDALL	5/15/2000	EAGLE RIDGE ELEM.	PHOENIX ZOO	4.50	55.00	5/15/2000 130	9:15 AM 20	1:00 PM	<input type="checkbox"/>
10524 K. Cox	5/15/2000	DESERT TRAILS ELEM	OASIS WATERWORLD	4.50	55.00	5/15/2000 100	9:15 AM 10	1:15 PM	<input type="checkbox"/>
10983 LYNN PETRUCCI	5/17/2000	VISTA VERDE MIDDLE	OASIS WATERWORLD	3.00	55.00	5/17/2000 25	9:30 AM 575	4:30 PM	<input type="checkbox"/>
10970 RICK ROSS	5/17/2000	GREENWAY MIDDLE	SUNSPLASH	3.00	119.00	5/17/2000 550	9:15 AM 25	4:30 PM	<input type="checkbox"/>
9869	5/17/2000	DESERT SHADOWS MIDDLE	OASIS WATERWORLD	2.50	55.00	5/17/2000 250	9:30 AM 25	4:00 PM	<input type="checkbox"/>
8999 lynn or marianne totman	5/17/2000	EXPLORER MIDDLE	OASIS WATERWORLD	4.00	45.00	5/17/2000 1000	9:15 AM 50	4:00 PM	<input type="checkbox"/>
10971 DORIS CINICOVE	5/17/2000	GREENWAY MIDDLE NEED MINI BUS	SUNSPLASH	4.75	119.00	5/17/2000 4	9:15 AM 7	1:30 PM	<input type="checkbox"/>
10941 DENNIS PERLEY	5/17/2000	SHEA MIDDLE	OASIS WATERWORLD	3.00	55.00	5/17/2000 500	9:15 AM 25	4:00 PM	<input type="checkbox"/>
10731 Julie Scott	5/17/2000	SUNRISE MIDDLE Handicap Bus	OASIS WATERWORLD	2.50	55.00	5/17/2000 300	9:15 AM 30	4:00 PM	<input type="checkbox"/>
10949 NEIL GATTEN	5/20/2000	LA CASA DE CRISTO CHURCH	OASIS WATERWORLD	7.00	55.00	5/20/2000 150	9:30 AM 20	4:00 PM	<input type="checkbox"/>
* * * Total Count: 10									

Figure D-1. An Example of the 2 Line Field Trip Report



Changing the Custom Report in Access 2000

1. Start Microsoft Access 2000 and open the database “TRIPRPT.MDB”. Click on the reports tab and select the report that you want to modify. **NOTE:** Before you change anything in a report, you should always work from a copy of the original report, giving it a new name, such as “RPT_FIELDTRIP_2LINE_DEMO” (Figure D. 2).

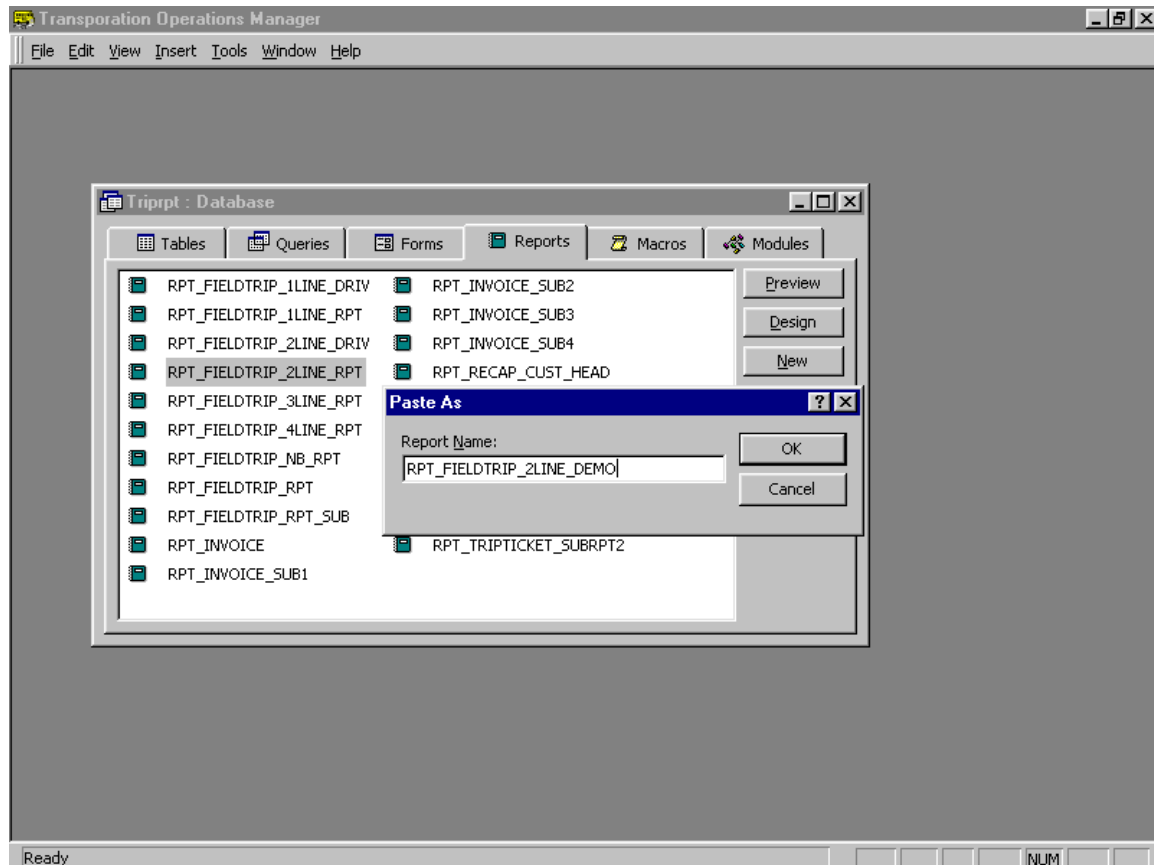


Figure D. 2 – Copying Report Format and Saving as a New Report



- Figure D-3 shows the list of T.O.M.'s custom reports in the custom report library TRIPRPT.MDB, which is loaded in Access 2000. You can see our new report RPT_FIELDTRIP_2LINE_RPT_DEMO. We click on our report and click on the Design button.

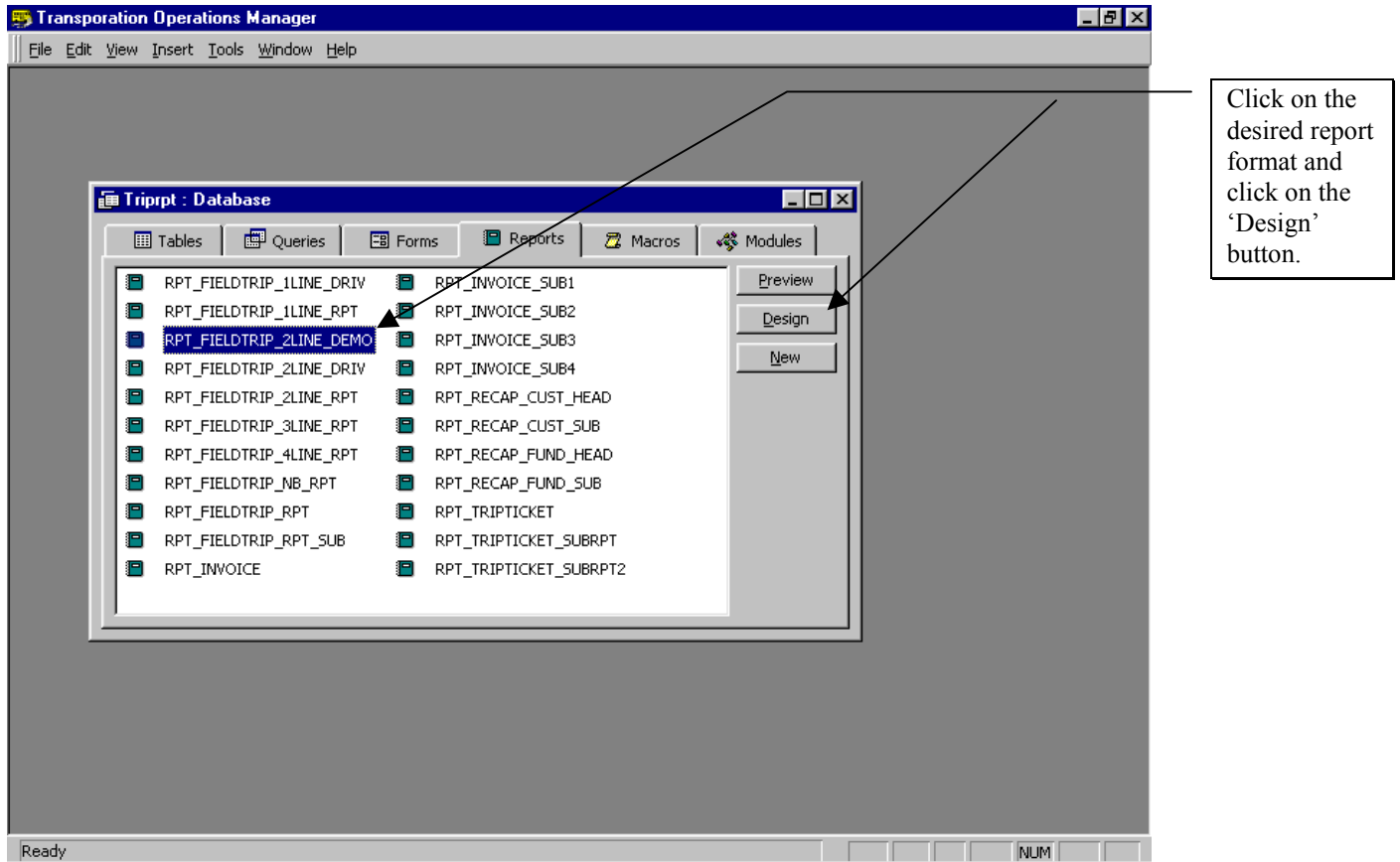


Figure D-3. Accessing the 2 Line Field Trip Report in Access 2000



- The report is opened in the Access 2000 Report Writer (Figure D-4). Report Writer is a very powerful tool that allows you to visually design your custom report using Access 2000.

Transporation Operations Manager - [RPT_FIELDTRIP_2LINE_DEMO : Report]

File Edit View Insert Format Tools Window Help

Report

Report Header

Page Header

=Now() DISTNAME Page: =[Page]

FIELD TRIP REPORT

USERTITLE

Trip # /	Dep. Date	Customer /	Destination /	Ret. Date /	LeaveTime /	Ret Time/	Cncl				
Contact		Purpose	Est. Time	Shtl	Est. Miles	# of Stud.	# of Adults				
<table border="1"> <thead> <tr> <th>Grade</th> <th>Assign</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table>								Grade	Assign		
Grade	Assign										

Detail

TRIPNUM	DEPDATE	CUSTNAME	DESTDESC	RETDATE	TBEGTIM	TENDTIM	
CONTACT		PURPOSE	ESTIME	<input checked="" type="checkbox"/>	ESTMILE	NUMSTUDENT	IMADUL
						GRADE	<input checked="" type="checkbox"/>

Page Footer

Report Footer

*** Total Count: NUMTRIPS

Design View

Figure D-4. The New 2 Line Field Trip Report Before Changes are Made



- Now we will remove the Grade field from the original report format (Figure D-4) and replace it with the Fund field (Figure D-5).

Transportation Operations Manager - [RPT_FIELDTRIP_2LINE_DEMO : Report]

File Edit View Insert Format Tools Window Help

Fund Times New Roman 8 B I U

Report Header

Page Header

=Now() DISTNAME Page: = [Page]

FIELD TRIP REPORT

USERTITLE

Trip # /	Dep. Date	Customer /	Destination /	Ret. Date /	LeaveTime /	Ret Time /	Cncl
Contact		Purpose	Est. Time Sktl Est. Miles	# of Stud.	# of Adults	Fund	Assign

Detail

TRIPNUI	DEPDATE	CUSTNAME	DESTDESC	RETDATE	TBEGTI	TENDTI	
CONTACT		PURPOSE	ESTIME <input checked="" type="checkbox"/> ESTMILE	HUMSTUDENT	JMADUL	FUND <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Page Footer

Report Footer

*** Total Count: NUMTRIPS

Design View

NUM

We've replaced the Grade field with the Fund field

Figure D-5. The New 2 Line Field Trip Report With The Grade Field Changed to the Fund



5. We then save the modified report and are returned to the database screen (Figure D-6). Are work is done, we then exit from Microsoft Access 2000

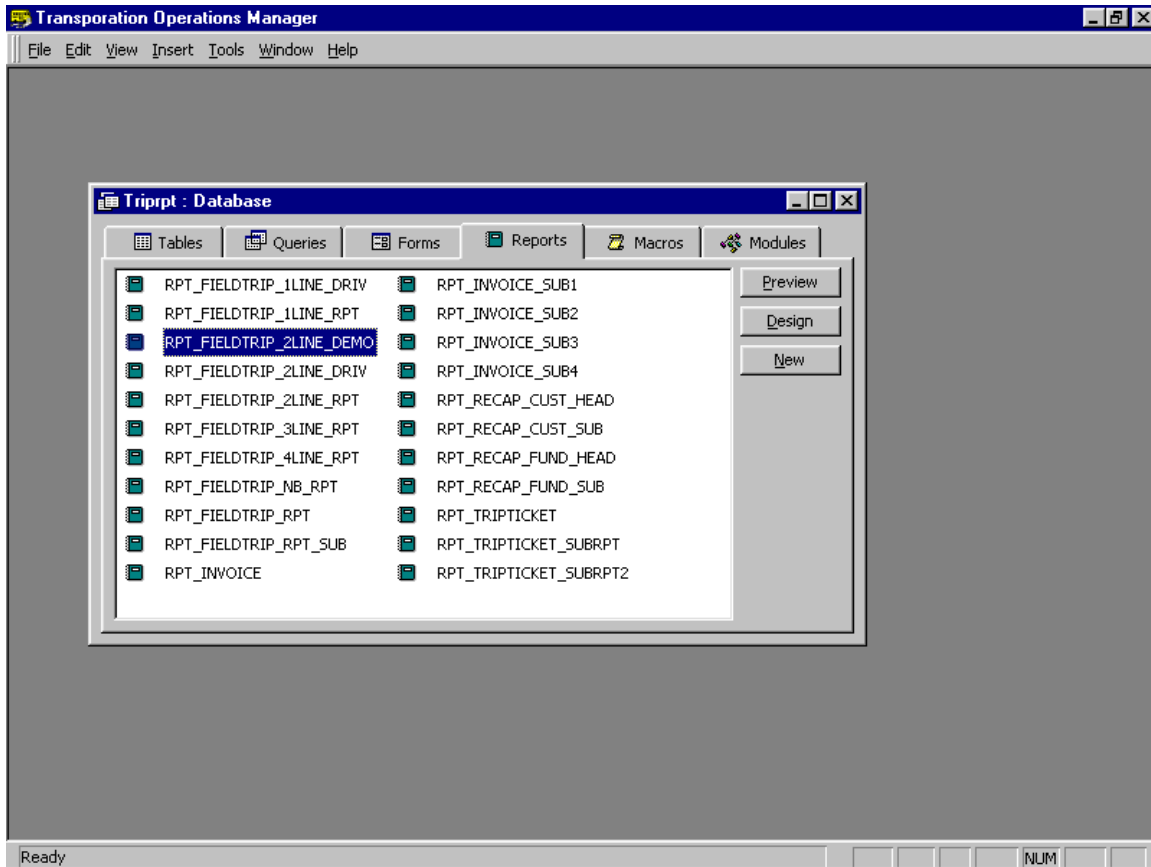


Figure D-6. The New Custom Report in the Report Library after the change



Using the Custom Report in T.O.M.

Now that the custom report has been changed, you can use it in T.O.M. to print your field trip report with the Fund field instead of the Grade field.

1. Open the Report menu option, click on Management Reports, and then click on Field Trip Reports (Figure D-7).

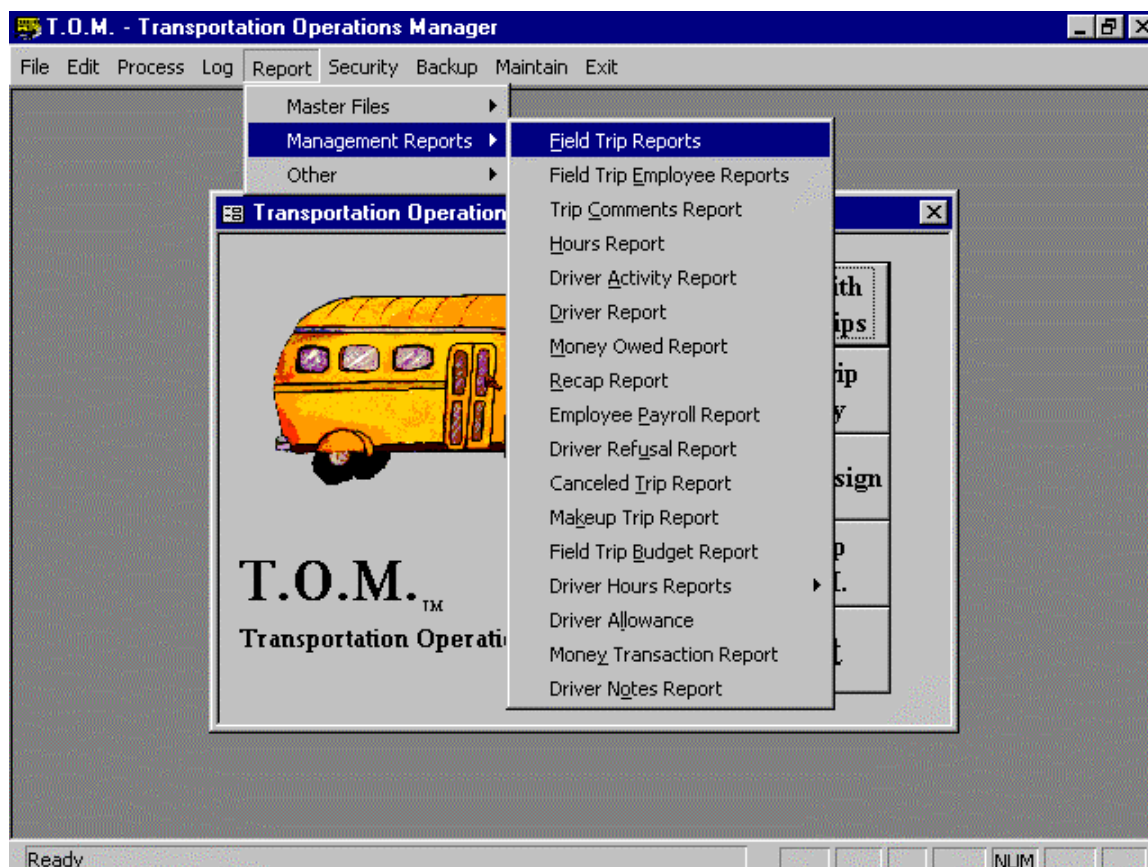


Figure D-7. Accessing the Custom Field Trip Report

The Field Trip Reports screen is displayed (Figure D-8).



2. Complete the screen to search and sort the field trips you want included in the report. See *Chapter 8 – Management Reports* if you need help. Do NOT select a report from the What Report field. Instead click on the Sorting tab (Figure D-8).

Click on the Sorting Tab.

Field Trip Reports Number of trips selected: 10

Field Trip Reports

Selection / Title Sorting Records Selected

Departure Date Range: From: 5/14/2000 To: 5/20/2000 Dates: Last Week

Selected Trip#: Selected Schedule: Fund:

Customer: Destination:

Selected Category: Selected Grade:

Selected Division: Selected Internal Number:

☒ Assigned ☒ Unassigned ☒ Billed ☒ Unbilled ☒ Canceled ☒ Open

What Report: 1 Line Split Trips: None

Title: Selected P.O.#:

Find All Print Preview Exit

Figure D-8. The Field Trip Reports Screen



3. The Sorting section of the Field Trip Reports screen displays (Figure D-9). Uncheck the Use standard T.O.M. Report Formats checkbox.

Field Trip Reports Number of trips selected: 10

Selection / Title **Sorting** Records Selected

Sort by #1: Departure Date Order By #1: Ascending

Sort by #2: Schedule Order By #2: Descending

Sort by #3: Trip # Order By #3: Descending

Use standard T.O.M. Report Formats: ☒

ACCESS Format: RPT_FIELDTRIP_ILINE_RPT

Build Employee Assignment Report Database: ☐

Find All Print Preview Exit

Uncheck
the Use
standard
T.O.M.
Report
Formats
box.

Figure D-9. Accessing Your Custom Report Through the Sorting Tab



- This 'enables' the ACCESS Format drop down list. This is a list of all of the reports contained in the Access 2000 database 'TRIPRPT.MDB'. This allows you to select exactly which report you wish to run. Here we will click on the 'Access Format' drop-down arrow and select RPT_FIELDTRIP_2LINE_DEMO from the list (Figure D-10).

Field Trip Reports

Number of trips selected: 10

Selection / Title	Sorting	Records Selected
Sort by #1: Departure Date	Order By #1: Ascending	
Sort by #2: Schedule	Order By #2: Descending	
Sort by #3: Trip #	Order By #3: Descending	

Use standard T.O.M. Report Formats: ☐

ACCESS Format: RPT_FIELDTRIP_1LINE_RPT
RPT_FIELDTRIP_1LINE_RPT
RPT_FIELDTRIP_2LINE_DEMO
RPT_FIELDTRIP_2LINE_DRIV
RPT_FIELDTRIP_2LINE_RPT
RPT_FIELDTRIP_3LINE_RPT
RPT_FIELDTRIP_4LINE_RPT
RPT_FIELDTRIP_NB_RPT
RPT_FIELDTRIP_RPT

Build Employee

Find All Print REVIEW Exit

Select the custom report you wish to print from the list of reports found in 'triprpt.mdb'.

Figure D-10. The Custom Report Selected in the ACCESS Format Field



5. The selected custom report will display in the ACCESS Format field. You are now ready to run the custom report by clicking the Print button. (Notice the Preview button is disabled. You may not preview a custom report). After a few minutes your custom report is printed (Figure D-12).

NOTE: Normally, T.O.M. would then create a temporary work table in the 'TRIPRPT.MDB' database containing the field trips selected for this report to be used by your custom report. However, if you were using the Field Trip Report with Employees or the Field Trip Report with Employees New Page Per Day reports formats as templates for your custom report then you would have to instruct T.O.M. to create a second temporary work table of the employee's assigned to these selected field trips. To do this you would need to click on the 'Build Employee Assignment Report Database' check box (see Figure D-11).

Figure D-11. The Field Trip Reports Screen, Sorting Section After the Desired Custom Report was Selected

Click the Print button to print the report. (You cannot preview a custom report).

If you were running a custom report based on the Field Trip Report With Employees or Field Trip Report With Employees New Page Per Day Report then you would need to click this check box to tell T.O.M. to build a second work table of the employees assigned to the selected field trips.

NOTE: T.O.M. displays ALL the report formats found in the database TRIPRPT.MDB in the ACCESS Format drop down list. However, certain report formats depend on certain work tables that are only built in certain screens. You must take care to run your custom reports from the correct screens based on what T.O.M. report you based your custom report upon. This will ensure that T.O.M. will rebuild the correct work table that your custom report uses. For example, you would not create a custom report based on the Recap Report Format and then run that custom report in the Print Trip Tickets Screen. T.O.M. would not build the correct report table needed by your custom report. See for a complete list of the report formats available for you to customize and the work tables (and screens that build them) these report formats use.





5/23/00 10:51:15 PM		PARADISE VALLEY SCHOOL DISTRICT # 69				Page: 1			
FIELD TRIP REPORT									
Trip # / Contact	Dep. Date	Customer / Purpose	Destination / Est. Time	Shtl	Est. Miles	Ret. Date / # of Stud.	LeaveTime / # of Adults	Ret Time/ Fund	Cncl Assign
10950 MINDY KENDALL	5/15/2000	EAGLE RIDGE ELEM.	PHOENIX ZOO	<input type="checkbox"/>	55.00	5/15/2000 130	9:15 AM 20	1:00 PM 8	<input type="checkbox"/>
10524 K. Cox	5/15/2000	DESERT TRAILS ELEM	OASIS WATERWORLD	<input type="checkbox"/>	55.00	5/15/2000 100	9:15 AM 10	1:15 PM 8	<input type="checkbox"/>
10983 LYNN PETRUCCI	5/17/2000	VISTA VERDE MIDDLE	OASIS WATERWORLD	<input type="checkbox"/>	55.00	5/17/2000 25	9:30 AM 575	4:30 PM 8	<input type="checkbox"/>
10970 RICK ROSS	5/17/2000	GREENWAY MIDDLE	SUNSPASH	<input type="checkbox"/>	119.00	5/17/2000 550	9:15 AM 25	4:30 PM 8	<input type="checkbox"/>
9869	5/17/2000	DESERT SHADOWS MIDDLE	OASIS WATERWORLD	<input type="checkbox"/>	55.00	5/17/2000 250	9:30 AM 25	4:00 PM 8	<input type="checkbox"/>
8999 lynn or marianne totman	5/17/2000	EXPLORER MIDDLE	OASIS WATERWORLD	<input type="checkbox"/>	45.00	5/17/2000 1000	9:15 AM 50	4:00 PM 8	<input type="checkbox"/>
10971 DORIS CINICOVE	5/17/2000	GREENWAY MIDDLE NEED MINI BUS	SUNSPASH	<input type="checkbox"/>	119.00	5/17/2000 4	9:15 AM 7	1:30 PM 8	<input type="checkbox"/>
10941 DENNIS PERLEY	5/17/2000	SHEA MIDDLE	OASIS WATERWORLD	<input type="checkbox"/>	55.00	5/17/2000 500	9:15 AM 25	4:00 PM 8	<input type="checkbox"/>
10731 Julie Scott	5/17/2000	SUNRISE MIDDLE Handicap Bus	OASIS WATERWORLD	<input type="checkbox"/>	55.00	5/17/2000 300	9:15 AM 30	4:00 PM 8	<input type="checkbox"/>
10949 NEIL GATTEN	5/20/2000	LA CASA DE CRISTO CHURCH	OASIS WATERWORLD	<input type="checkbox"/>	55.00	5/20/2000 150	9:30 AM 20	4:00 PM 15	<input type="checkbox"/>
*** Total Count: 10									



Figure D-12. An Example of the Customized 2 Line Field Trip Report with the Fund Field



Report Name	Description	Work Table Used	Screen to Run Report From
RPT_FIELDTRIP_1LINE_DRIV	1 Line Field Trip Drivers Report	QTBL_FIELDTRIP_EMP_RPT	Field Trip Employee Reports
RPT_FIELDTRIP_1LINE_RPT	1 Line Field Trip Report	QTBL_FIELDTRIP_RPT	Field Trip Reports
RPT_FIELDTRIP_2LINE_DRIV	2 Line Field Trip Drivers Report	QTBL_FIELDTRIP_EMP_RPT	Field Trip Employee Reports
RPT_FIELDTRIP_2LINE_RPT	2 Line Field Trip Report	QTBL_FIELDTRIP_RPT	Field Trip Reports
RPT_FIELDTRIP_3LINE_RPT	3 Line Field Trip Report	QTBL_FIELDTRIP_RPT	Field Trip Reports
RPT_FIELDTRIP_4LINE_RPT	4 Line Field Trip Report	QTBL_FIELDTRIP_RPT	Field Trip Reports
RPT_FIELDTRIP_NB_RPT	Field Trip Report with Employees	QTBL_FIELDTRIP_RPT	Field Trip Reports
RPT_FIELDTRIP_RPT	Field Trip Report with Employees New Page per Day	QTBL_FIELDTRIP_RPT	Field Trip Reports
RPT_FIELDTRIP_RPT_SUB	A sub report of all drivers assigned to each field trip. It is used in both RPT_FIELDTRIP_NB_RPT and RPT_FIELDTRIP_RPT	QRY_FIELDTRIP_RPT_SUB	(You shouldn't print this report – it is used in Field Trip Report with Employees and Field Trip Report with Employees New Page Per Day)
RPT_INVOICE	Invoice	QTBL_INVOICE	Individual Invoice Print, Group Invoice Print and Mass Billing
RPT_INVOICE_SUB1	Sub Report that is the invoice's subtotal miles and hours charges section.	QTBL_INVOICE	(You shouldn't print this report – it is used when printing invoices.)
RPT_INVOICE_SUB2	Sub Report that is the invoice's flat charges section.	QTBL_INVOICE	(You shouldn't print this report – it is used when printing invoices.)
RPT_INVOICE_SUB3	Sub Report that is the invoice's detail employee charges section.	QTBL_INVOICE_SUB	(You shouldn't print this report – it is used when printing invoices.)
RPT_INVOICE_SUB4	Sub Report that is the invoice's step billing charges section.	QTLB_INVOICE	(You shouldn't print this report – it is used when printing invoices.)
RPT_RECAP_CUST_HEAD	Recap Report sorted by Customer / Fund	QRY_RECAP_CUST_HEAD – Query using work table - QTBL_RECAP_CUST_SUB	Recap Report

Continued on next page...



Report Name	Description	Work Table Used	Screen to Run Report From
RPT_RECAP_CUST_SUB	Sub Report of detail information for Recap Report sorted by Customer and Fund	QTBL_RECAP_CUST_SUB	(You shouldn't print this report – it is used when printing Recap Report sorted by Customer / Fund.)
RPT_RECAP_FUND_HEAD	Recap Report sorted by Fund / Customer	QRY_RECAP_FUND_HEAD – Query using work table - QTBL_RECAP_FUND_SUB	Recap Report
RPT_RECAP_FUND_SUB	Sub Report of detail information for Recap Report sorted by Fund and Customer	QTBL_RECAP_FUND_SUB	(You shouldn't print this report – it is used when printing Recap Report sorted by Fund / Customer.)
RPT_TRIPTICKET	Trip Ticket	QTBL_TRIPTICKET_RPT	Individual Trip Ticket Print, Mass Assign, Group Trip Ticket Print.
RPT_TRIPTICKET_SUBRPT	Sub Report – used in trip ticket – listing all drivers assigned to a field trip.	QTBL_TRIPTICKET_SUB2	(You shouldn't print this report – it is used when printing trip tickets.)
RPT_TRIPTICKET_SUBRPT2	Sub Report – used in trip ticket – listing destinations and addresses of trips.	QTBL_TRIPTICKET_SUB	(You shouldn't print this report – it is used when printing trip tickets.)

Figure D. 13 – List of Reports Available Customizations

