U627: Equipment PM Routes and Route Work Orders
EXAMPLES NEEDED FOR TRAINING

Slide 4: Query up an active route from the Equipment Route screen and show the students the basic make up of the route; the list of equipment and the PMs.

Slide 6: Query up an active route work order and review it’s components.

Slide 7: review the thought processes behind planning a route, stress that they should work with the Planner/Scheduler on this.

Slide 10: Briefly review the equipment route form and where they can find data related to the route.

Slide 16: Query up and print an active route work order.

Slide 17: Review how to identify route work orders in the backlog and how to schedule one.

Slide 19: Review how to view timecard comments from the Supervisor Labor Approval form. Also print a copy of the Web Report: Estimated & Actual Hours for Active Route Work Orders found at Public Folders>Zone Reports>Zone 3 Reports>Estimated & Actual Hours for Active Route Work Orders.

Slide 20: Make a daily schedule for each student ID, making sure to schedule several route work orders with an OPEN status to each student ID. Allow the students to work through the process of entering labor against a route work order.

Slide 25: Query up an active “child” work order and create a quick Issue Request for a filter or belt.

Slide 26: Query up an active “child” work order and then create a “child” work order for follow-up repairs.

Slide 27: Query up an active “parent” work order and then go through the process of closing the route.

Slide 35: Provide an active “parent” route work order number to each student so they can practice closing it.
SUBJECTS COVERED IN THIS UNIT:

- Introduction ...................................................... 4
- Planning Equipment PM Routes ....................... 7
- Equipment PM Route Form ......................... 10
- Identifying PM Route Work Orders ............... 16
- Scheduling PM Route Work Orders ............. 18
- Entering Labor on a Route WO ..................... 20
- Ordering Material from PM Route WOs ......... 25
- Follow-Up Repairs for PM Route WOs ........ 26
- Route Work Order Closing Form .................... 27
- Closing Route Work Orders ......................... 35
An equipment PM route consists of...

- A list of similar pieces of equipment in close proximity of each other (i.e. WAC, unit heaters, supply fans, exhaust fans)
- Programmed or Planned PM files that are scheduled to the list of equipment
INTRODUCTION

- Equipment PM routes....

1. Increase the efficiency of completing similar tasks on similar pieces of equipment in close proximity to each other
2. Simplify the daily scheduling process for the Supervisor
3. Simplify the PM scheduling process for the Planner/Scheduler

- Once the equipment PM route has been programmed in COMPASS, a route work order is automatically generated and deposited in the appropriate crew backlog
INTRODUCTION

A route work order consists of...

1. A “parent” work order number which is used for scheduling purposes. Labor should never be charged to this work order.

2. Multiple “child” work order numbers; one for each piece of equipment on the route.

Equipment field of the “parent” work order contains the Route ID

Click the Related WO button to view the “child” work orders that make up the route.
Work with the Planner/Scheduler in your District when programming a new route or modifying an existing route in COMPASS.

Before creating a new route, check to see if one doesn’t already exist. Because naming standards have been inconsistent, utilize the Building and the Route Short Description description fields when querying.
PLANNING EQUIPMENT PM ROUTES

- Select the equipment numbers that will be listed on the route based on the following criteria:
  1. Equipment type
  2. Equipment location

- Select the PM files that will be scheduled to the equipment PM route.

- Decide the PM frequency, first due date, crew(s) number and size, and estimated hours to complete the PM tasks.
PLANNING EQUIPMENT PM ROUTES

- Create a Route ID; naming standards have been inconsistent in the past, however, a naming standard does exist.

- Example of a Route ID: Z3EXH142-01
  a. Zone = Z3
  b. Equipment nomenclature = EXH
  c. Building = 142
  d. File number = -01
EQUIPMENT PM ROUTE FORM

U627 Equipment PM Routes and Route Work
Orders Ver 1
EQUIPMENT PM ROUTE FORM

1. To create a new equipment PM route in COMPASS, access Routes from the Navigator screen to bring up the Equipment Route form.

2. Routes have been named inconsistently in the past, but most Route IDs consist of a building number or zone, an equipment nomenclature and a file number.

3. Enter the route brief description next to the route name.

4. Site is 01 for Minneapolis and 02 for St. Paul.

5. Building will be assigned if the route includes equipment in one building, however, if the route includes various buildings, the Building field can be left blank.

6. The Equipment tab lists the equipment that is included on the route.

7. Click the Accounts... button to enter the account number to charge.
8. Select the Route Acct Group for the **Account Group Name**.
9. Select ACTUALS for the **Billing Type**.
10. Click the **Accounts** button.
11. Enter an account number and click **OK**.
12. Enter the percentage to charge (must total 100%), then click the **OK** button from the **Accounts** form.
13. Clicking the **Clear Account** button will clear all the accounts after confirming the change.
14. The **Dates**... button lists who modified the account numbers and when.
EQUIPMENT PM ROUTE FORM

U627 Equipment PM Routes and Route Work
Orders Ver 1
15. The Preventive Maintenance tab lists all ACTIVE and INACTIVE PMs scheduled to the list of equipment.

16. The **View** button will bring up the *Preventive Maintenance* form for the selected PM number. It lists the default information and the entire text of the PM.

17. The **Add** button will bring up the *Preventive Maintenance* form for the selected PM number, and then a PM can be queried up and added to the list of ACTIVE PMs on the Preventive Maintenance tab. A Planned PM can also be created from the *Preventive Maintenance* form and added to the route.

18. The **Criteria** button will allow scheduling of the PM, assigning of crews and crafts, estimated hours and additional account information.

19. The **Last PM** button will list the last PM parent work order number, the status of the work order, start date, due date, and last date it was scheduled.

20. The **Dates...** button will list the modification dates of the PM, when it was last active and inactive, and who made the change.
IDENTIFYING PM ROUTE WORK ORDERS

- The printed “parent” route work order is identified by the Route ID in the Equipment field; e.g., 142RADRH-01, 142FUMEXH-02.
- An individual child work order number is listed in the body of the “parent” route work order with each piece of equipment on the route.
IDENTIFYING PM ROUTE WORK ORDERS

From the *Daily Schedule* crew backlog, the route work orders are best viewed from the PM WORK ORDERS BY DUE DATE (INCLUDING ROUTE WORK ORDERS) public view.

Route work orders are identified by a Route ID in the Equipment field. Because routes have been named inconsistently, the only sure way to identify a route is that the Route ID will not have the same format as an equipment number (i.e. 143-CHIL01, 103-UPS001, 125-D1001).
Only the “parent” route work order number appears in the Daily Schedule crew backlog. “Child” and “parent” work orders can be viewed from the Current Schedule workbench.

The “parent” route work order is then scheduled to an employee(s), and the entire route work order is printed for the line staff to use as a guide.
SCHEDULING PM ROUTE WORK ORDERS

- Tracking the progress of a route work order so it can be rescheduled or closed can be challenging. Suggestions for managing this are:

1. Line staff can enter comments on their timecard stating the status of the route so the supervisor can view the comments when approving timecards.

2. Line staff can update the hard copy of the route work order and review it with the supervisor at the close of each day.

3. The Supervisor can print a status report of the open routes in their backlog before creating the daily schedule for the following day. The report can be found on the FM Web Reporting webpage under **Public Folders>Zone Reports>Zone 3 Reports>Estimated & Actual Hours for Active Route Work Orders**.
ENTERING LABOR ON A ROUTE WO

**EXERCISE 1**

1. Enter your assigned username in the **Employee** field and the current date in the **Work Date** field
2. Click the **Daily Schedule** tab
4. Put the cursor in the **Hours** field of any work order listed on the Daily Schedule tab

5. The Route Work Order warning appears

6. Click **OK** and then click the **Route Work Orders...** button
7. The *Find Route Work Orders* form appears listing the parent work order and all the child work orders for the route
8. Click the **Check All** button to put time against all the child work orders
9. Enter 4 in the **Hours** field
10. Click **OK** and the hours entered will be distributed evenly to the child work order numbers checked
11. Click the Timecard tab to view the child work orders carried forward to the timecard
12. Check the Work Done? checkbox of all the child work orders
13. Click the Save and Approve button
14. Click OK when the approval process pop-up box appears
ENTERING LABOR ON A ROUTE WO

The theory behind distributing time to route work orders is that all “checked” work orders received approximately the same amount of effort when the PM task was performed.

However, if there was a work order that required more time by itself, leave this work order number “unchecked” on the first pass. Enter the child work order number independently on the Timecard tab and enter the hours worked. Also add a comment in the Comment field to explain the additional time required.
ORDERING MATERIAL FROM PM ROUTE WOs

- Only material required to perform the PM is allowed to be charged to the equipment PM route.

- If ordering a single belt or filter, charge it to the “child” work order that corresponds to the equipment number you are working on.

- If ordering a case of filters or multiple belts, charge it to the “parent” work order.

- When ordering material on a route work order, the same processes are followed for creating Stock Issue Requests and ordering from Bills of Material as you would with a regular work order.
FOLLOW-UP REPAIRS FOR PM ROUTE WOs

- If a piece of equipment requires follow-up repair after performing a PM, a “child” work order is created from the “child work” order on the route.
- Change the Type on the new work order to CORRECTIVE and fill in the rest of the fields as you normally would.
ROUTE WORK ORDER CLOSING FORM
1. Access the Route Work Order Closing form from the Navigator screen. You can also right click a Parent WO Number from anywhere in COMPASS and choose Close... from the drop down menu to access the Route Work Order Closing form.

2. Query up a parent work order number in the WO Number field.

3. All the child work orders appear on the Record Readings tab; click the Close Work Orders tab to close the child work orders and parent work order.

Reference Fields, Function Buttons and Tabs:

- **Header section:**
  - **Route ID:** The name of the route; this is auto-filled from the work order and cannot be edited from here.
  - **WO Number:** The parent route work order number.
  - **Unlabeled field:** The brief description of the route; this is auto-filled from the work order and cannot be edited from here.
  - **Condition:** Not currently being used by FM.
  - **Cause:** The cause for the repair such as vandalism, power loss, fungal, asbestos, CFC, human error. This field is auto-filled from the work order and cannot be edited here.
  - **Action:** What was the final action of the work order. This field is auto-filled from the work order and cannot be edited from here; it will usually be blank.
  - **Status:** This is the status of the parent work order number only. This field is auto-filled from the work order and cannot be edited here. When the parent work order is closed or completed, the field will automatically be updated.
  - **View...:** Click to view the parent work order detail.
ROUTE WORK ORDER CLOSING FORM
Child Work Order Reference Fields:

- **WO Number**: Child work order number.
- **Status**: Status of the child work order.
- **Equipment**: Equipment number for each child work order.
- **Nomenclature**: Brief description of the equipment for each child work order.
- **Condition**: Not currently being used by FM.
- **Cause**: The cause of the repair if any.
- **Action**: The final action of the child work order.
- **Charge Labor Tab**: Can be used to enter labor hours; however, labor is generally entered using the *Labor Timecard* form.
- **Record Readings Tab**: 
  - **Readings...**: Used to enter equipment readings; not currently being used by FM.
  - **View...**: To view the checked or highlighted child work order detail.
- **Close Work Orders Tab**: 
  - **Close...**: Click to bring up the *Closing Information* form for the checked or highlighted child work order so they can be closed or reopened.
  - **View...**: Click to view the work order that is highlighted or checked.
  - **Close Route...**: Click to close the parent work order. All child work orders must be closed before the parent can be closed.
  - **Close Dates...**: To view the cut off dates when labor, material and invoices can be charged to the highlighted or checked work order.
  - **Check All**: To check all the child work orders on the route. The system defaults to checking all the child work orders.
  - **Uncheck All**: To uncheck all the child work orders on the route.
4. Click the checkbox next to the child work orders you wish to close or use the Check All or Uncheck All.
5. Click the Close... button to access the Closing Information form.
6. Select CLOSED; or use the LOV button for other options. This is what the status will be changed to for all the checked child work orders.
7. Select the cause for the work order repair if applicable (vandalism, asbestos, fungal, CFC, power loss, human error). Use the LOV button to view other options.
8. Select the work order final action, which is usually COMPLETED as planned; use the LOV button to view other options. This is a required field.
9. Click the OK button to return to the Route Work Order Closing form.

Reference Fields:

- **Work Data section:**
  - Start Date: The earliest date when the work could begin.
  - Due Date: When the work was due to be completed.
  - Arrived: Not currently being used by FM.
  - Completed: The default is the current date, however, if the work order status was changed previously to COMPLETED, it may be a prior date.
- **Employee Data section:**
  - Assigned To: The person assigned to the work order; not the same as the person scheduled.
  - Authorized By: Not currently being used by FM.
  - Inspected By: Not currently being used by FM.
- **Action Codes section:**
  - Condition: Not currently being used by FM.
ROUTE WORK ORDER CLOSING FORM

- Route ID: 174-ICE01
- WO Number: WCO1151781
- ICE MACHINE/COFFEE MAKER FILTER CHANGES
- Status: OPEN

Record Readings:
- WC Number: WCO1151782, CLOSED, 174-ICE001
- WC Number: WCO1151783, CLOSED, 174-ICE002
- WC Number: WCO1151784, CLOSED, 174-ICE003
- WC Number: WCO1151785, CLOSED, 174-ICE004
- WC Number: WCO1151786, CLOSED, 174-ICE005
- WC Number: WCO1151787, CLOSED, 174-ICE006
- WC Number: WCO1151788, CLOSED, 174-ICE007
- WC Number: WCO1151789, CLOSED, 174-ICE008
- WC Number: WCO1151790, CLOSED, 174-ICE009

Charge Labor:
- View...
- Close...
- View...
- Close Route...
- View...
- Check All
- Uncheck All

Close Work Orders:
- Close Dates...
- Close Dates...
- Check All
- Uncheck All

Closing Information:
- Work Data:
  - Status: CLOSED
  - Start Date: WED APR 4, 2007
  - Due Date: SUN JUL 1, 2007
  - Completed: THU DEC 6, 2007 10:2AM

Employee Data:
- Assigned To:
- Authorized By:
- Inspected By:

Action Codes:
- Condition:
- Cause:
- Action: COMPLETED
10. Only after all of the child work orders have been closed, can the parent work order number be closed by clicking the **Close Route...** button.
11. Change the **Status** field to CLOSED.
12. Select the cause if applicable; use the **LOV** button for more options.
13. Select the final condition of the work order; generally COMPLETED as planned.
14. Click the **OK** button to return to the *Route Work Order Closing* form.
CLOSING ROUTE WORK ORDERS

**EXERCISE 2**

1. Access the Route Work Order Closing form from the Navigator screen
2. Query up the parent work order you were given for this exercise by entering it in the WO Number field
3. Click the Close Work Orders tab
4. Click the Close... button
5. In the Status field select CLOSED from the LOV
6. In the Action field select COMPLETED from the LOV
CLOSING ROUTE WORK ORDERS

7. Click the **OK** button
8. Click the **Close Route...** button
9. In the **Status** field select CLOSED from the LOV
10. In the **Action** field select COMPLETED from the LOV
11. Click the **OK** button