NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
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Attachment 13 – Dispatch Resource Handbook

Dispatch Flight Following Program

OPERATIONAL FACTORS

DCA16IA215

jetBlue

Dispatch Resource Handbook (DRH)

Revision 18

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7 Dispatch Flight Following Program

7.1 Introduction

Last Revised: 2015-08-06

The following tools satisfy all FAR requirements for Flight Following, and allow the Dispatcher to maintain operational control:

- Movement Control.
- ACARS.
- AirCom.
- Flight Explorer.
- ITM (Integrated Traffic Management).
- Flight Plan Manager.
- NWS.
- WSI.

Operational control is ultimately maintained by sustaining:

- Access to OOOI times for the flight;
- A Navigational log; and
- Two-way communication with each flight.

Movement Control

Though FPM is the basic flight planning tool, Movement Control is the primary flight following tool used to track flights.

ACARS

During normal operations, ACARS feeds the Movement Control with OOOI times which populate FPM.

If ACARS is out of service, OOOI times are retrieved through prescribed ACARS outage procedures; i.e., obtaining an aircraft's position by scoring the Flight Plan using the Out and subsequent Off times, which provide the ability to review the aircraft's past, present, and future positions.

AirCom

AirCom, like ACARS, AirCom is a communications platform used to maintain two-way communication with a flight. (See other sections of this manual for details of the capabilities of AirCom.)

Flight Explorer

Flight Explorer provides a visual representation of an aircraft's current position, the route flown, and the planned route. Also, through Flight Explorer, a number of tools can be overlaid to aid in flight planning as well as flight following.

Examples of these tools include, but are not limited to, the following:

- **Flight Plan** function: Shows how the flight was planned respective to its current position.
- **Show Route Flown** function: Shows where the flight actually flew, up to its current position.
- **NWS** and **WSI** weather products.
- **VOR, Navaid**, and **SUA** representation.

ITM

Like Flight Explorer, ITM provides a visual representation of flight status.

- ITM provides the aircraft's position with more frequent position updates than does Flight Explorer.
- ITM provides situational awareness, not only to the enroute environment, but also to Terminal, and Ground movements. (Ground movements are based on airports that are equipped with ASDE-X capabilities.)

Monitoring enroute and terminal weather takes precedence over all flight planning duties.

- The ability to proactively monitor reports and trends based on all available information helps the Dispatcher to stay ahead of the flight.
- Proactive weather monitoring affords the Dispatcher time to determine if rerouting a flight, change a destination alternate, or address other flight contingencies, is necessary to conduct the flight legally and safely.

During flight watch, Dispatchers must be alert to all conditions that may affect the safety of all flights. Possible hazards to the flight must be immediately communicated to the PIC.

Conditions to monitor include, but are not limited to, the following:

- Enroute and destination weather.
- Temporary flight.
- Advisories for closed airways or military activity.
- ATC reroutes.

7.2 Flight Leading

Last Revised: 2015-08-06

Flight Leading is JetBlue's method of giving Flight Following a more proactive role.

Flight Leading practices are encouraged as to keep pilots and Dispatchers ahead of their flights and aids in anticipation of particular dynamics that can affect a particular flight operation.

Examples of disruptions (dynamics) that can affect a flights operation include but are not limited to:

- Airmets on flight path.
- Sigmets on flight path.
- Weather on route.
- Pireps (company and other) that will affect the flight.
- Anticipated arrival flow (Smooth or volume).
- Current holding ahead.
- Runway in use at destination.
- VIP movement.
- Best ride altitude (Based on reports are charts).
- Better wind routing.
- Expected gate issue at destination.
- Updated destination weather (TAF).
- Braking Action.
- Volcanic activity.

In order to provide Flight Leading, it is imperative to continually monitor each and every flight. When monitoring flights consider the following:

- Plotting and examining the route for potential flight dynamics.
- Periodically reviewing the latest weather charts to see how flights are affected.
- Requesting PIREPS from flights ahead (or from Dispatchers with flights ahead).
- Calling the tower for updated BA reports.
- Monitoring Passur for potential holding.
- Run scenarios (Sandbox) once airborne for better route optimization.
- Notify the Crew of applicable ATC advisories.

All information should be clearly communicated to the flight crews. Communication should be made through AirCom using the “Flight Leading” dropdown option.

7.2.1 Flight Status / Rotation View

Last Revised: 2015-08-06

As soon as a flight receives a departure message or position report, it is switched into **Inflight Mode** and displayed as airborne on the FPM **List** Tab **/ Rotation** view.

To access the **Rotation** view, from the **List** tab click the **Rot** button.

Note

The **Rot** button is a toggle button and is used to switch between the **Flight List** view and the **Rotation** view. Click the **Rot** button on the **List** tab to access the **Rotation** view and the button changes to **Lst**. Click the **Lst** button to return to the **Flight List** view.

Figure 7-1. FPM List Tab - Flight List View

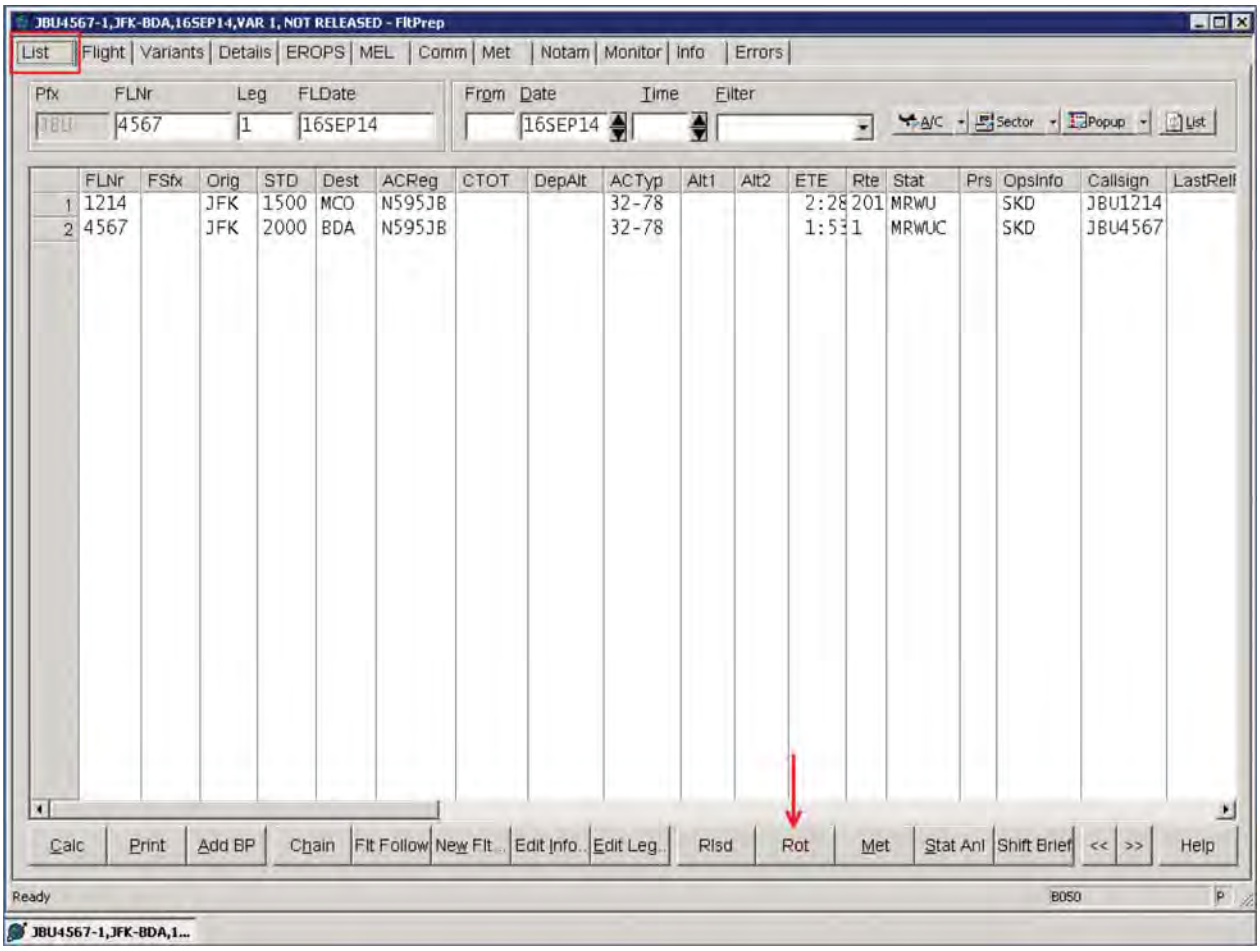


Figure 7-2. FPM List Tab - Rotation View

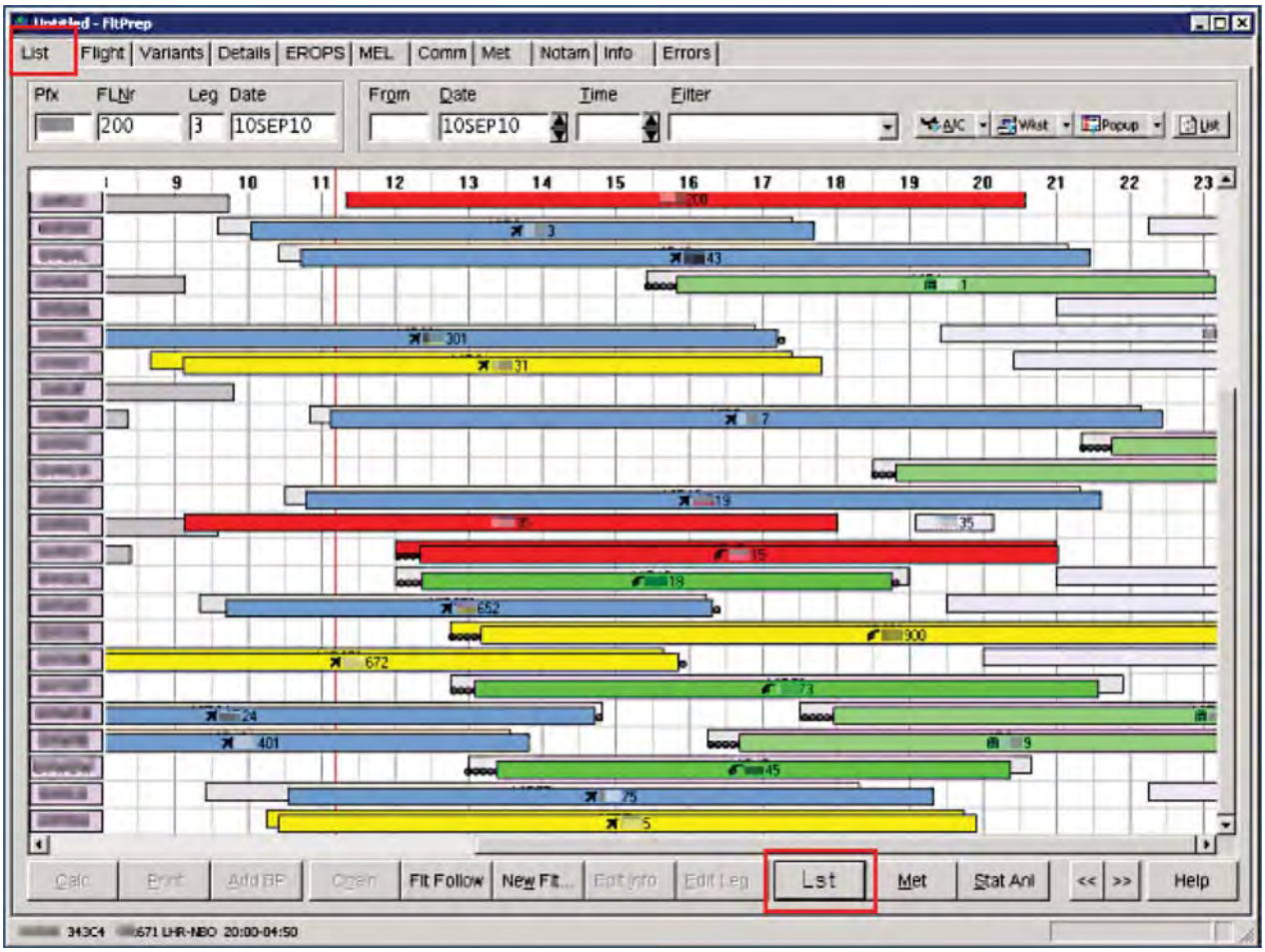


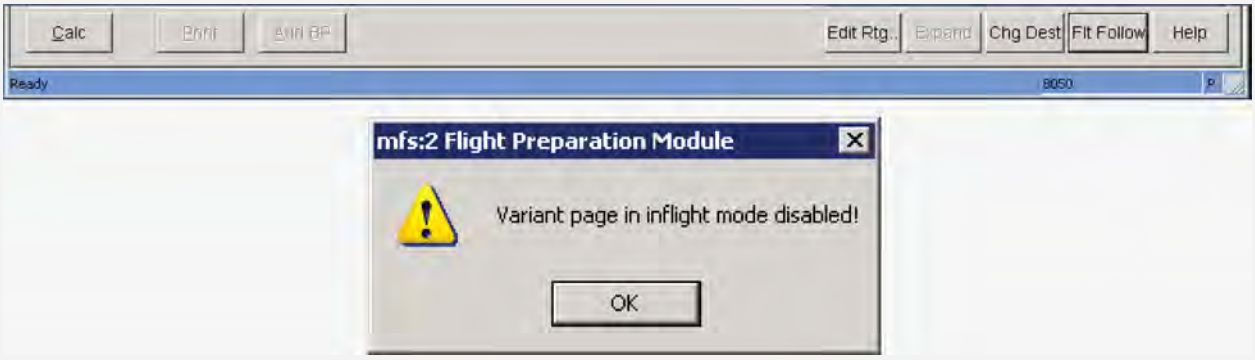
Table 7-1. FPM List Tab / Rotation View Key

35	Flights that have not yet been touched start off with light grey color.
9	Calculated flights turn light green, with a small calculator icon next to the flight number.
201	As they have their OFP printed, a printer icon appears instead.
18	As soon as the Fuel Message was sent, the flight turns a darker shade of green, and display a small nozzle icon.
301	When a departure message or Position Report is received or inserted manually, the flight turns blue with an aircraft with its nose up.
20	After the arrival message was received, it turns dark grey and the aircraft icon shows with its nose down.

	Flights in diversion are displayed in a dark yellow, with a 'rerouting' arrow icon.
	Small grey circles represent statistical taxi time which has been entered into the airport data, and which was considered in the flight calculation.
	As long as the aircraft hasn't arrived, the current status flight bar is laid over the original schedule to visualize taxiing and delays.

Note

When entering an airborne flight, the status bar at the bottom of the screen turns blue, and the **Variants** tab cannot be accessed in order to avoid accidental route changes in FPM (a warning screen is displayed).



7.3 Weigh Station Process

Last Revised: 2015-08-06

International civil aviation and/or airport authorities may require weighing aircraft. This process may be determined randomly by a daily lottery or by notification. The flight crew will contact the dispatcher when a weigh procedure needs to be accomplished.

The dispatcher must ensure that the load manifest is sent to the station's General Manager (or designee) to comply with this requirement.

Currently, weigh station procedures exist at the following locations:

- El Dorado International Airport, Bogota, Colombia (BOG/SKBO)

7.3.1 BOG Weigh Station Procedure

Last Revised: 2015-08-06

El Dorado International Airport (Bogota, Colombia) Civil Aviation and Airport Authorities (DGAC) require weighing aircraft. This process is determined randomly by a daily lottery.

Departing aircraft requiring a weight check will be notified by Clearance Delivery when the ATC clearance is requested. Arriving Aircraft will be notified by Ground Control.

The following procedures apply when a weigh check is required:

Note

The flight crew will use the ACARS **Inop** form to comply with the below requirements when the ACARS system is inoperative.

- DGAC requires a company declaration of the final load manifest for verification and auditing purposes and notifies either the General Manager or our Business Partner.
- Flight Crew will complete the Weigh Station Procedure in accordance with the procedures outlined in the ABG.
- Flight Crew will notify the dispatcher of the procedure.
- The dispatcher will send the final load manifest to the Station Supervisor on Duty and/or General Manager by forwarding the weight and balance message from AirCom to [redacted].

If actual weight exceeds calculated weight by more than 1%, the following will apply:

- Aircraft will be required to return to gate (RTG) to remove excess weight and then return for re-weighing.
- The flight crew will notify the dispatcher of the RTG.
- The dispatcher will recalculate the Flight Plan with the actual Zero Fuel Weight (ZFW) and send it to the flight crew.

Records

Dispatch Release. The following is an example of the final load manifest that can be retrieved via AIRCOM Server:

Figure 7-3. Dispatch Release Remarks-

```
QU JBUGLXS
.JBUGLXS 281405
M27
FI B61784/AN N571JB
DT QXS BOG1 281405 M10A
-  REL 527803, FLT B61784, DEP 13R,TOF 28300,ZFW 125450,ZCG 33.8, TOW

153830,TCG 31.3,MAX 154830,RMP 154530,CAP 34872
```

7.4 Change of Conditions

Last Revised: 2015-08-06

Continually check the weather conditions at the flight's destination airport to ensure the flight's ability to adhere to required alternate minimum requirements, especially if collected data suggests that the destination weather may experience a degrading trend.

If an alternate was assigned to a flight, monitor the weather at the Alternate Airport to ensure weather conditions remain at or above alternate minimums at the ETA.

If the weather falls below alternate landing minimums for the Alternate Airport:

1. Assign another alternate that is within the fuel range of the flight.
2. Amend the Dispatch Release accordingly. Record the Amendment with Dispatcher's initials and the time.

END OF TASK.

7.5 FPM Flight Following Position Report

Last Revised: 2015-08-06

The tasks of calculating time over (CTO) and entering Flight Following Position Report information are automatically completed through an FPM interface; however, adjustments to the entries can be manually completed when necessary.

Information regarding significant deviations from the original Flight Plan must be addressed with the Flight Crew.

Flight Plan deviations to resolve include, but are not limited to, the following:

- The estimated time of arrival (ETA) at the destination exceeds 15 minutes beyond the Flight Plan ETA.
- The cruise altitude varies by more than four thousand (4,000) feet from the Flight Plan, or
  - The aircraft deviates more than one hundred (100) nautical miles (NM) from the flight-planned route (except for arrival vectoring, etc.).
- Any reroute from planned routing in EROPS operations.
- Any significant change in fuel burn.

Note

The Captain and Dispatcher jointly determine if any significant Flight Plan deviations will permit the flight to proceed to the destination or if a diversion enroute is required.

Follow the steps below to access the Flight Following Position Report:

1. Navigate to the **List** tab and select the flight.
2. Go to the **Details** tab; click the **Flt Follow** button; the **Flight Following** screen is displayed (the Flight Following Position Report).

Figure 7-4. FPM Details Tab – Flt Follow Button

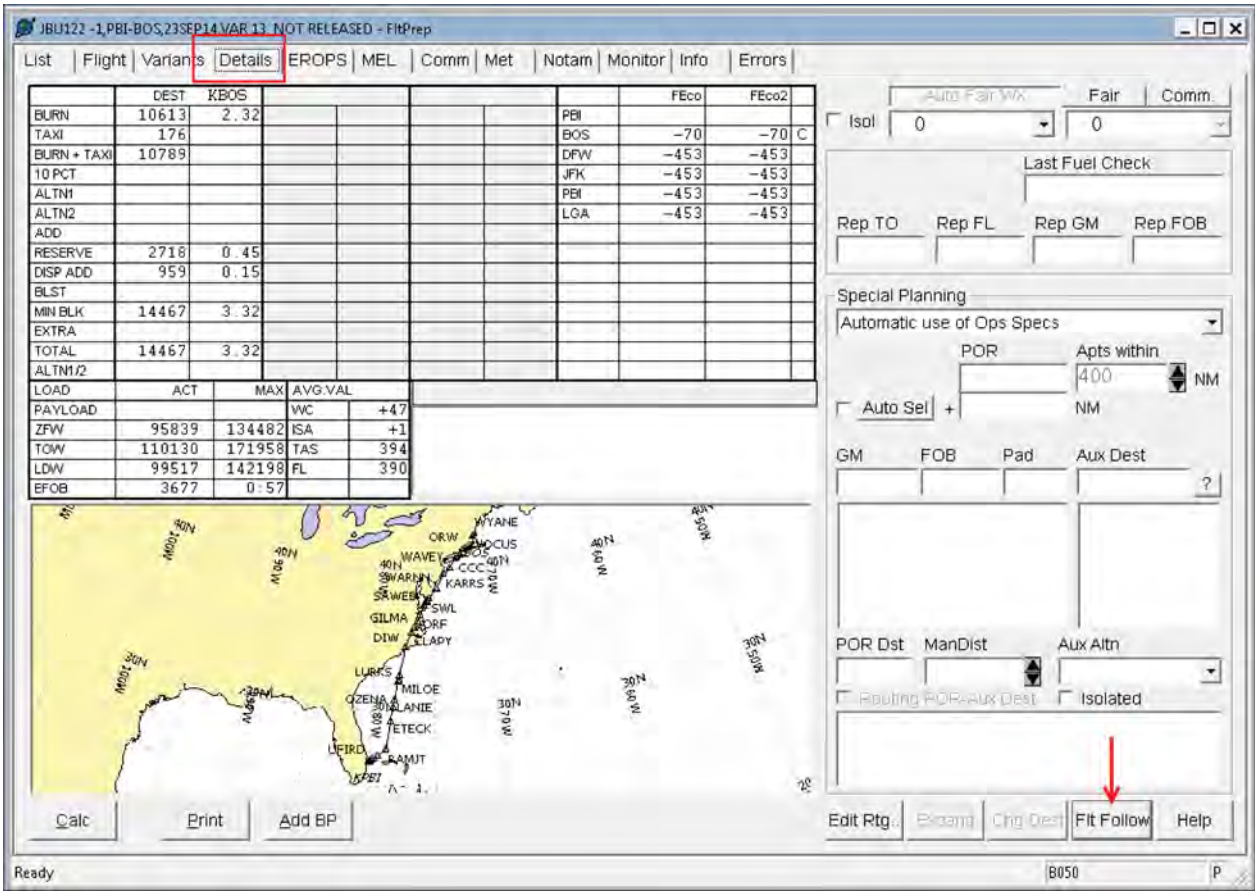
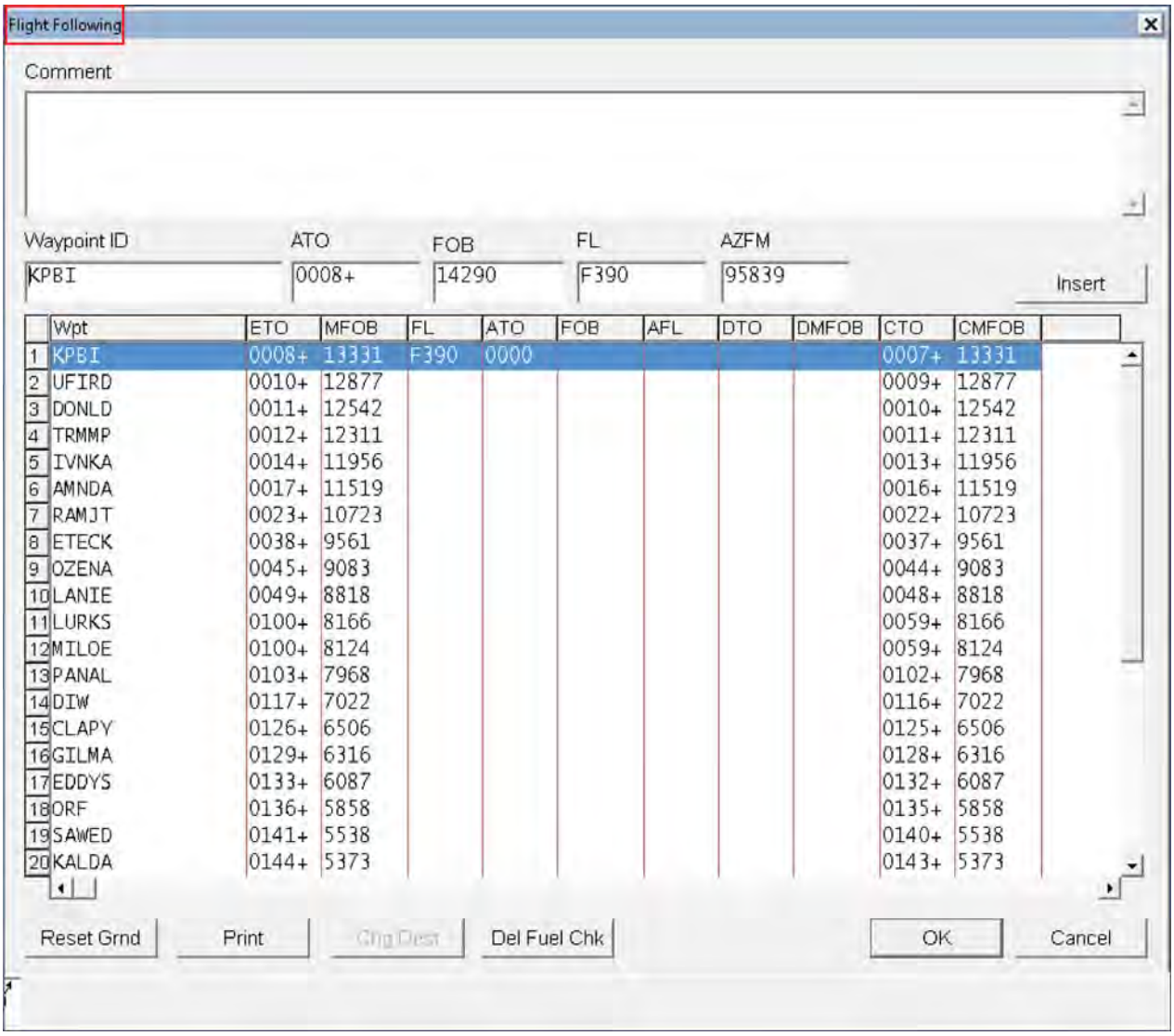


Figure 7-5. Flight Following Position Report



END OF TASK.

7.5.1 Accessing FPM's Flight Following Screen

Last Revised: 2015-08-06

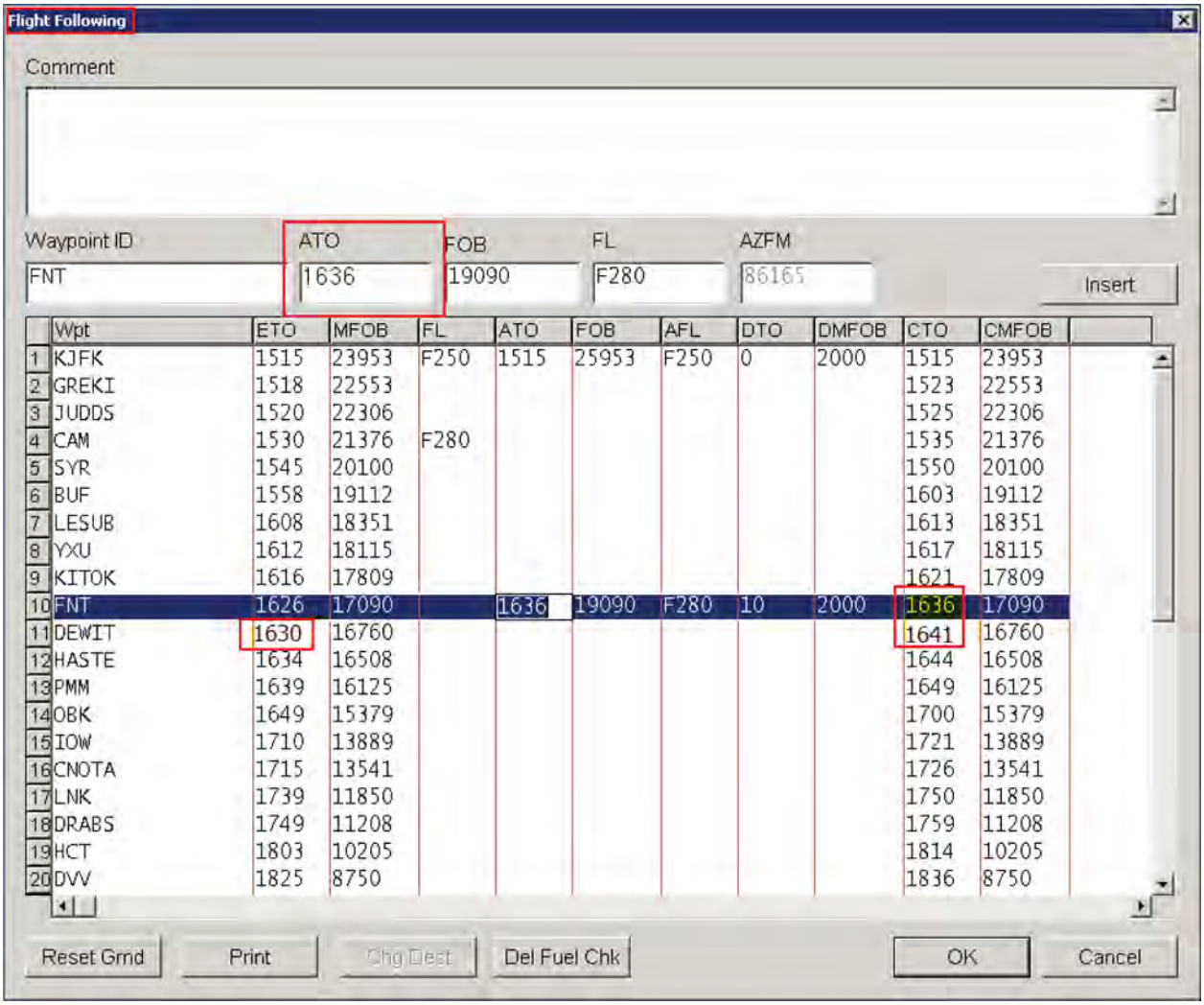
Once a Position Report is received, FPM Position Reports automatically populate on the **Flight Following** screen.

Note

Out and Off times automatically populate on the FPM **Monitor** and **List** tabs.

The Position Reports not only update the Calculated Time Over (CTO) for the flight under review, but update all subsequent flight CTOs as well.

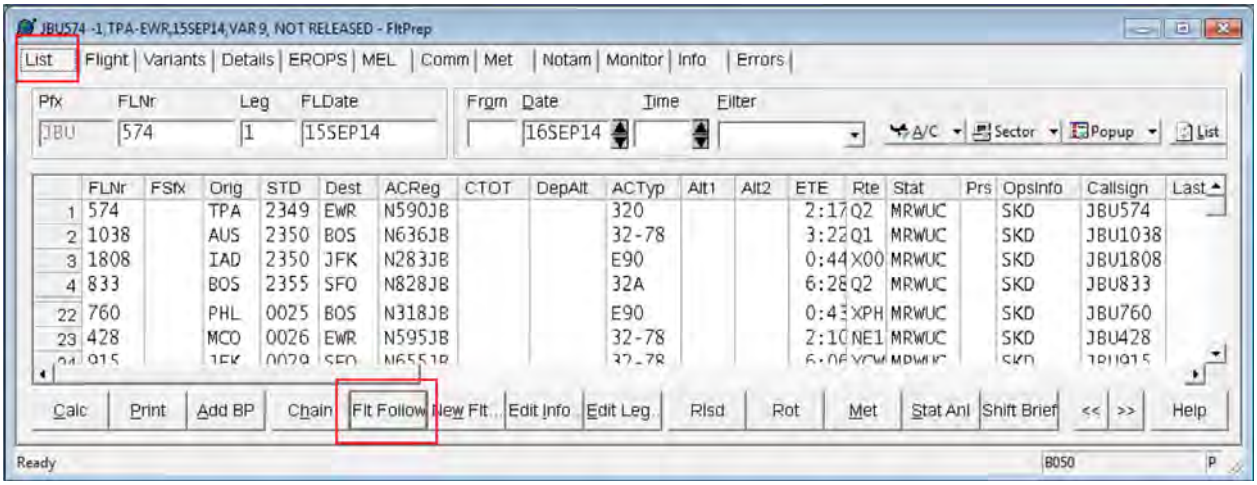
Figure 7-6. Flight Following Screen - Position Report Updates



To access the **Flight Following** screen, click the **Flt Follow** button. The **Flt Follow** button is located on two FPM tabs:

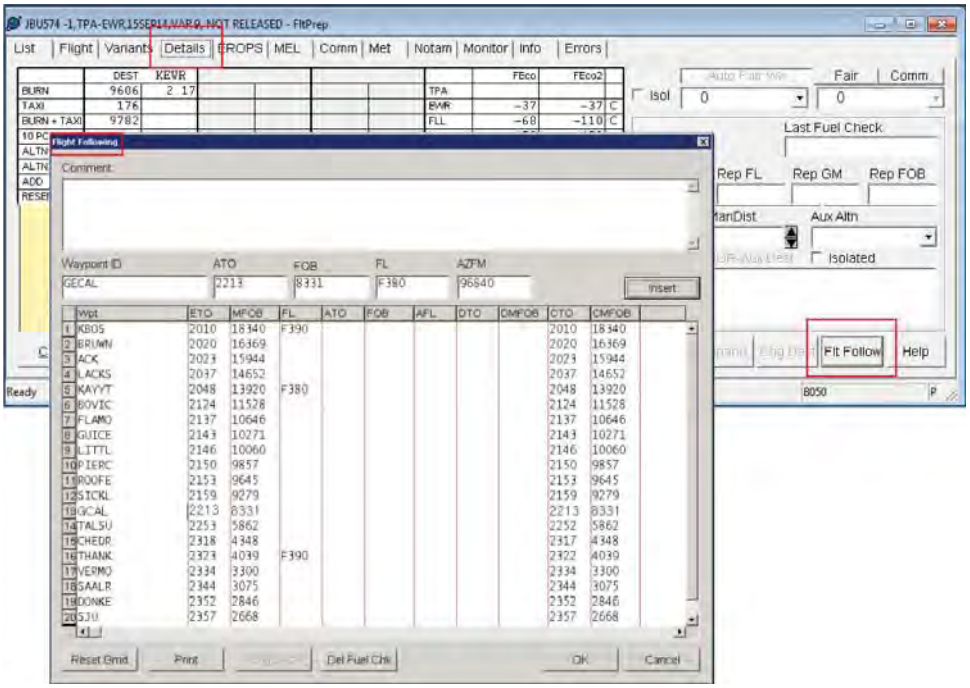
- The **List** tab.

Figure 7-7. FPM List Tab



- The **Details** tab.

Figure 7-8. FPM Details Tab



7.5.2 Manually Enter Position Reports

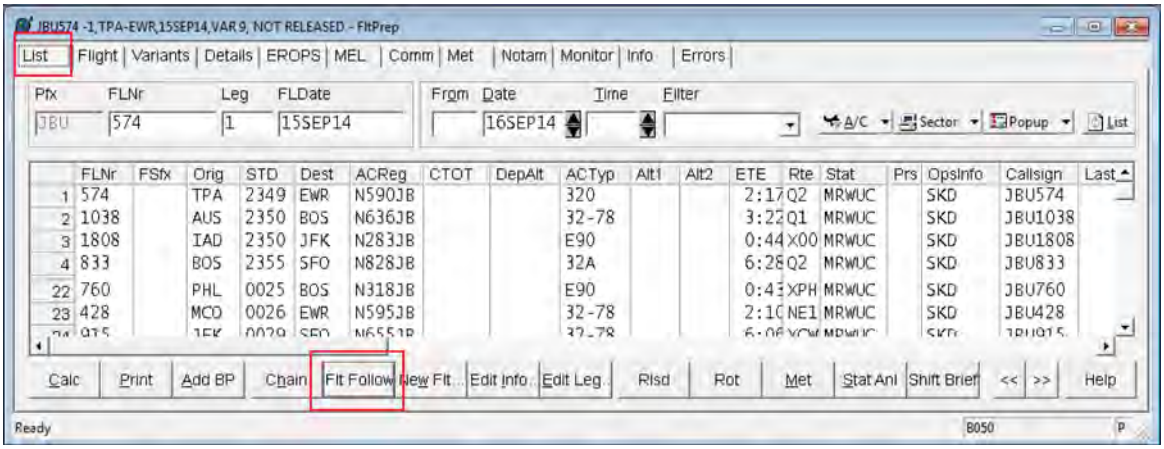
Last Revised: 2015-08-06

Follow the steps below to create a manual position report entry:

1. Navigate to the FPM **List** tab and select the flight.
2. Click the **Flt Follow** button to display the **Flight Following** screen.

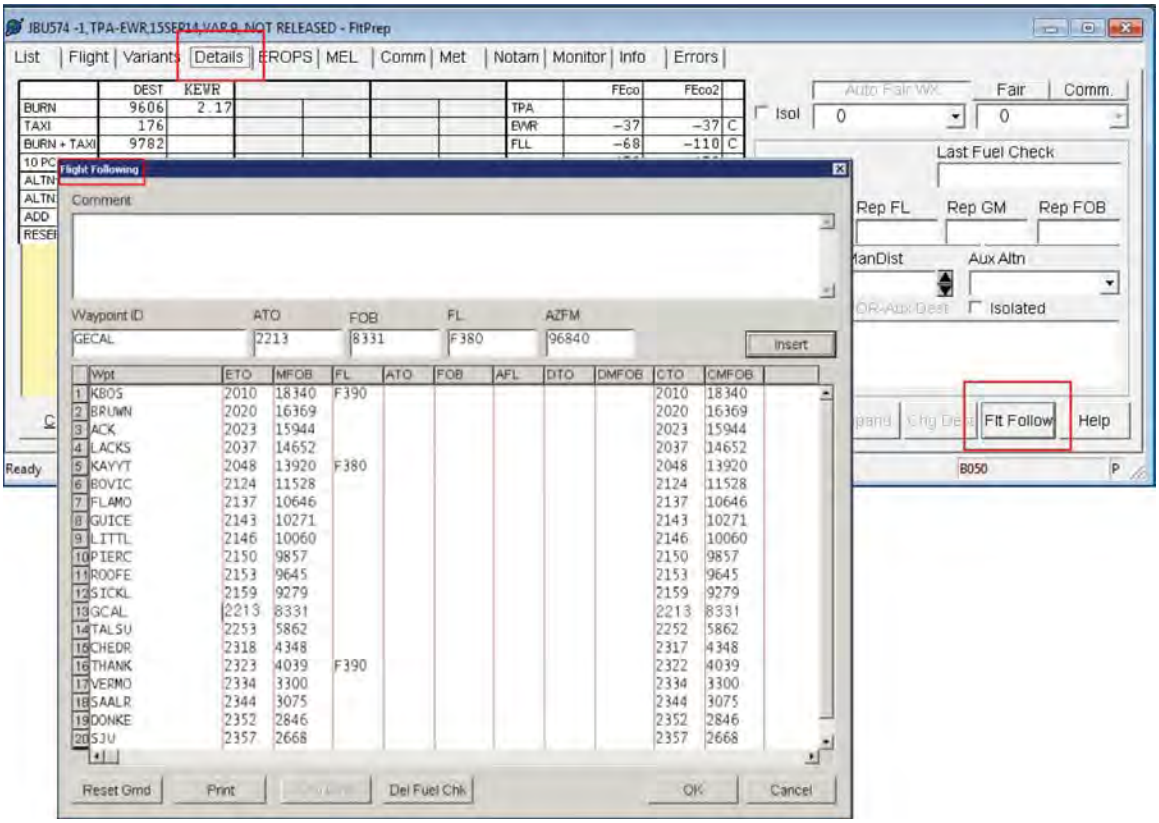
   The **Flt Follow** button is located on two tabs:
   - The **List** tab.

Figure 7-9. FPM List Tab - Flt Follow Button



- The **Details** tab.

Figure 7-10. FPM Details Tab



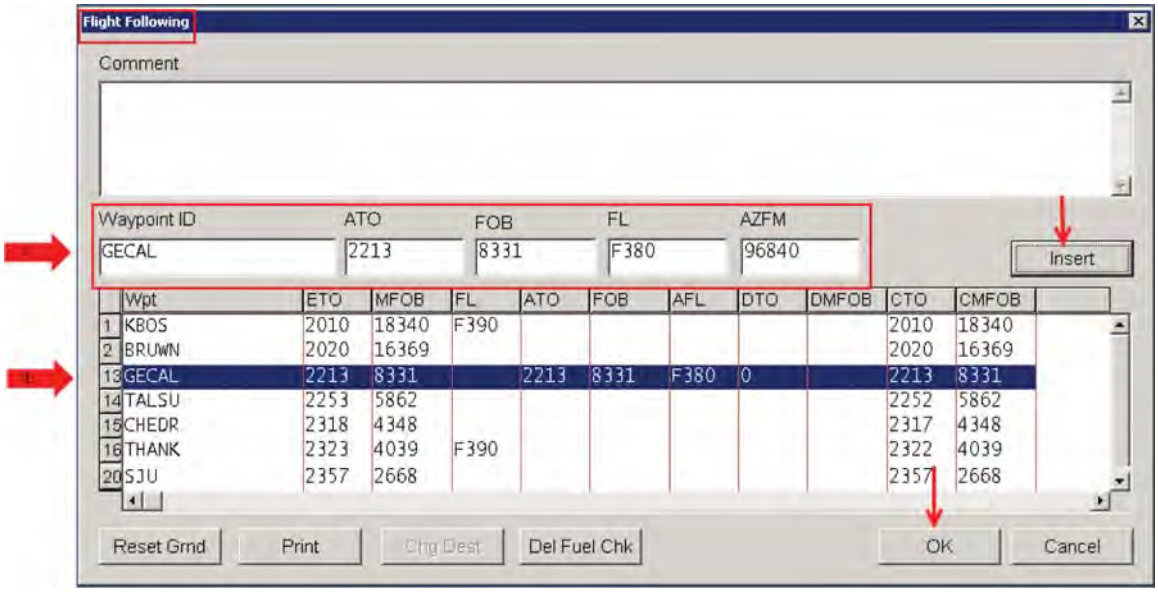
3. On the FPM **Flight Following** screen, locate the corresponding position and enter the following information:
   - Aircraft's position.
   - Time.
   - Altitude.
   - Fuel on board.

   To enter information on the **Flight Following** screen, either:

   a. Type the appropriate information into the **Waypoint ID**, **ATO**, **FOB**, **FL**, and **AZFM** fields.
      - Click the **Insert** button, or:

   b. Overwrite the information displayed in the columns of the **Flight Following** screen.

Figure 7-11. Flight Following Screen



4. Click the **OK** button to save all changes.
5. Re-calculate the Flight Plan to apply the changes.

END OF TASK.

The following table provides information for each field of the **Flight Following** screen:

Field/Column/Button	Description
Comment Field	Free text area for storing notes.
Waypoint ID Field	Either an existing waypoint in the routing, or a reported lat/long waypoint created by entering the coordinates in the **Waypoint ID** field.
ATO Field/Column	Actual Time Overhead (entered manually or via Position Report). **Note** A different ATO at the departure will change the ETO, while enroute ATOs will not have an effect on the **ETO** column. Instead, only the CTO is updated.
FOB Field/Column	Actual Fuel On Board.
FL Field/Column	Actual Flight Level.

Field/Column/Button	Description
AZFM Field	Actual Zero Fuel Mass. This is usually entered by the Departure Message which contains the final weights and fuels. When entering fuel checks manually in FPM, this field can be editable or locked, according to configuration.
WPT Column	Tabular listing of all enroute waypoints.
ETO Column	Estimated Time Overhead, based on the latest calculation; i.e., if new ATOs were entered and an inflight calculation is run, the ETOs will reflect the new times.
MFOB Column	Minimum Fuel On Board. The amount of fuel that should be on board, based on the last preflight calculation. **Note** Per configuration, certain fuels are not required in **MFOB** unlike the **MINBL** value on the **Details** tab; therefore, these values may differ.
AFL Column	Actual Flight Level.
DTO Column	Delta Time Overhead, the difference between the planned (ETO) and actual (ATO) Time Overhead.
DMFOB Column	Delta Remaining Fuel, the difference between the planned minimum (MFOB) and actual (FOB) Fuel On Board.
CTO Column	Calculated Time Overhead, the predicted Time Over the remaining waypoints, updated from the ATOs as they are entered. As soon as an inflight calculation is run, the CTOs will reflect the same values as the ETO from the last fuel check onwards. Previous values are discarded (shown as 0000).
CMFOB Column	Calculated Minimum Fuel On Board based on a recalculation of the plan using the reported conditions in flight, from the last fuel check onwards. Previous values are discarded (column is blank).
Insert Button	Adds the information entered into the **Waypoint ID**, **ATO**, **FOB**, **FL**, and **AZFM** fields into the columns of the **Flight Following** screen.
Reset Grnd Button	Deletes all fuel checks and brings the flight from Inflight Mode back into Preflight Planning Mode.
Print Button	Prints the Flight Following screen.
Del Fuel Check Button	Deletes a highlighted fuel check.
OK Button	Confirms the changes made on the **Flight Following** screen and brings the flight into Inflight Mode (if not already set as such).
Cancel Button	Cancels changes and returns to the previous screen.

7.6 Diversion Procedures

Last Revised: 2015-08-06

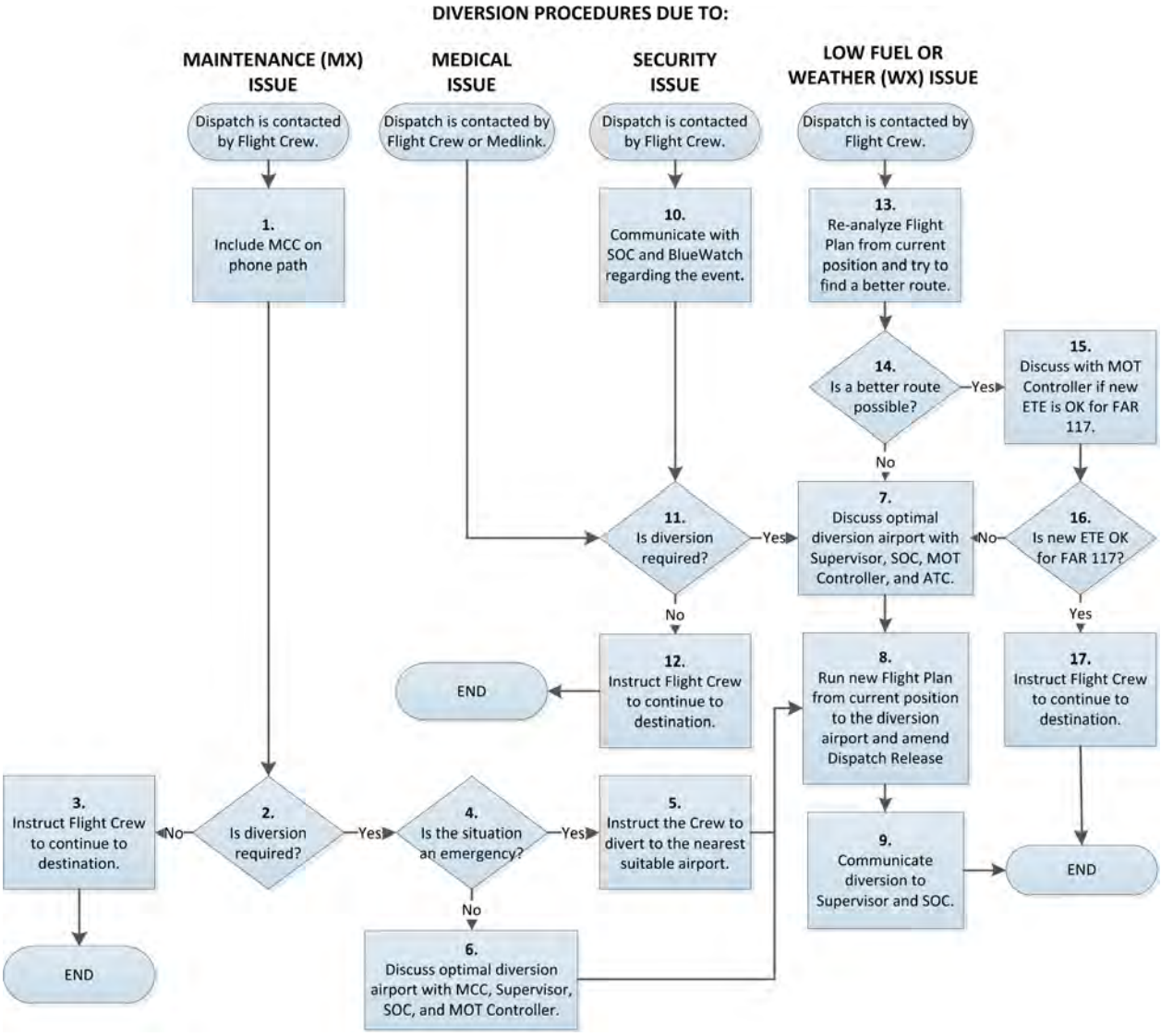
7.6.1 Enroute Diversions

Last Revised: 2015-08-06

If a diversion is required, it is important to communicate with MOT Controller and SOC regarding possible options.

Diversion procedures do not supersede safety and legal considerations, but should be used in conjunction with them to minimize disruption and affect an optimal outcome.

Figure 7-12. Unplanned Enroute Diversions



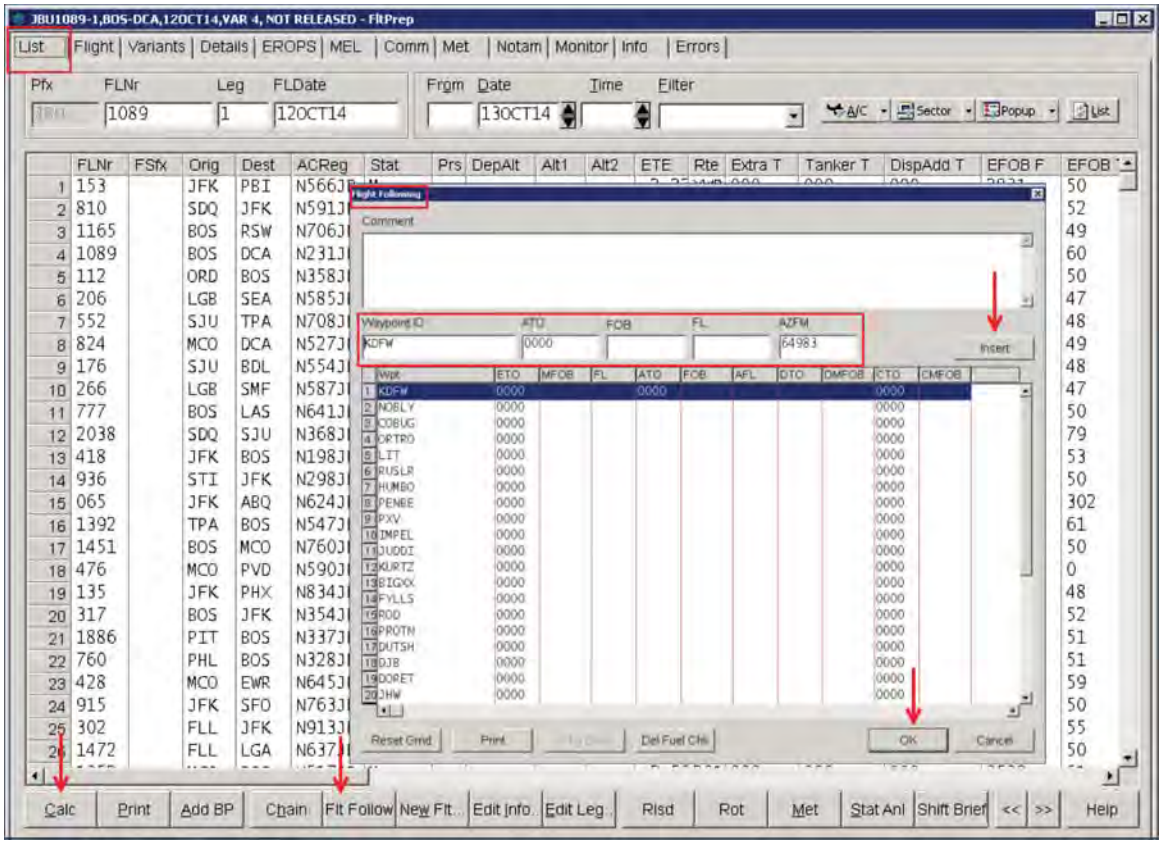
7.6.2 Diversion Calculation

Last Revised: 2015-08-06

Follow the steps below to calculate a diversion:

1. Navigate to the FPM **List** tab and highlight the flight.
2. On the **List** tab, click the **Flt Follow** button. The **Flight Following** screen is displayed. (The **Flight Following** screen may also be accessed by clicking the **Flt Follow** button on the **Details** tab.)
3. Enter information pertaining to the flight status over the diversion point (i.e., **Waypoint ID**, **FOB**, and **FL** fields).
4. Click the **Insert** button.
5. Click the **OK** button.

Figure 7-13. FPM List Tab - Flight Following Screen



6. On the **List** tab, click the **Calc** button.

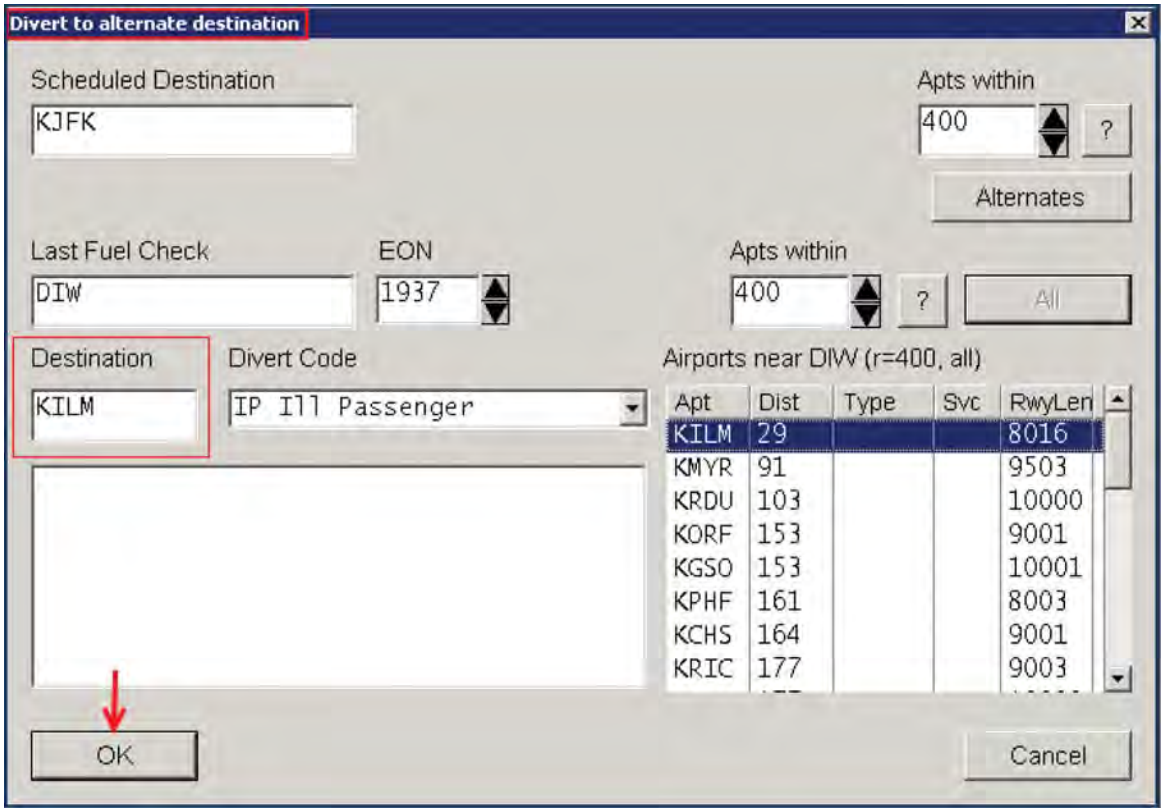
7. Go to the **Details** tab; click the **Chg Dest** button (also available on the **Monitor** tab, and the **Flt Following** screen). The **Divert to alternate destination** screen is displayed.

8. Enter the new destination in the **Destination** field. All other fields are optional.

Note

Changing the destination clears the current route from the last reported position/fuel check and inserts the new destination.

Figure 7-14. Divert to Alternate Destination Screen



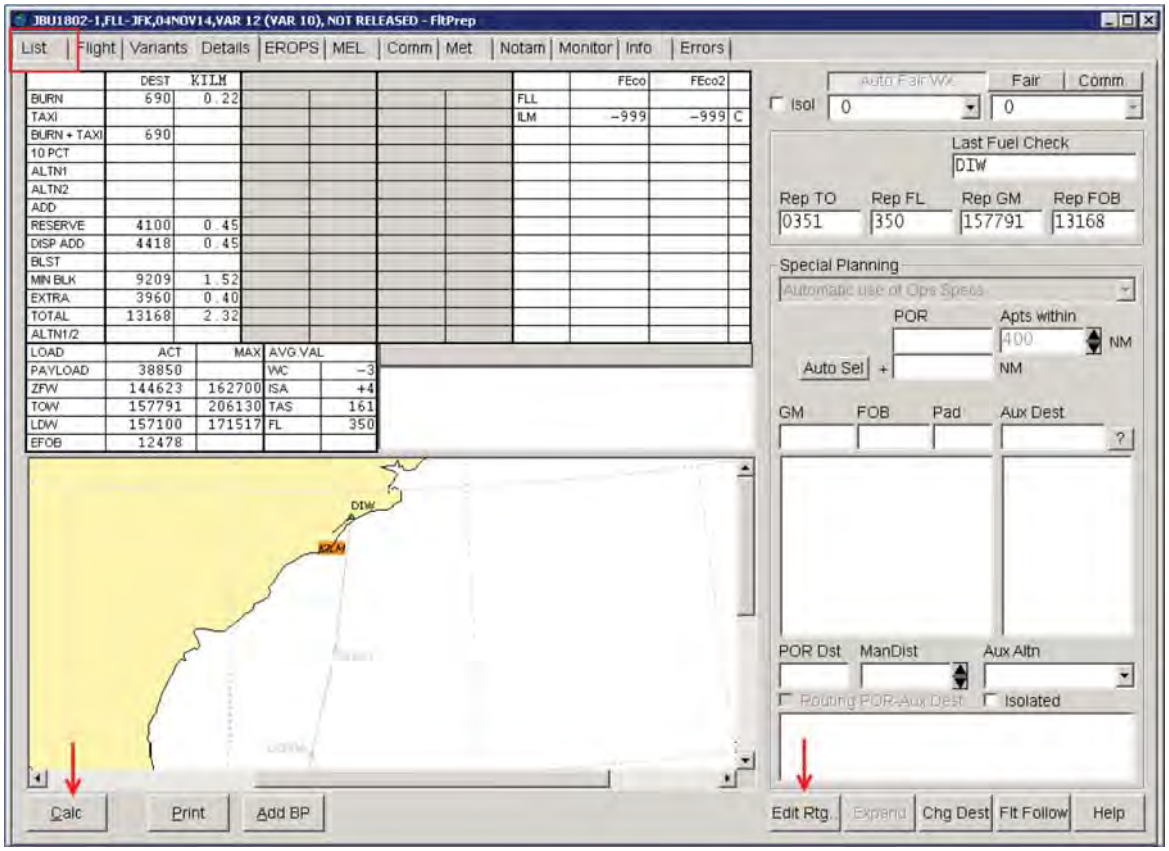
9. Click the **OK** button. FPM automatically creates a direct route. To optimize a route or manually create a route, click the **Edit Rtg** button on the **Details** tab.

Note

The **Flt Following** screen is updated with the changed route, and can be populated with additional Position Reports.

10. On the **Details** tab, click the **Calc** button to receive fuel requirement information on the new route.

Figure 7-15. FPM Details Tab / Calc and Edit Rtg Buttons



END OF TASK.

Table 7-2. Divert to Alternate Destination Screen - Field Information

Field	Description
Scheduled Destination	The currently planned destination airport.
Apts within (top)	Radius in NM around the Scheduled Destination, in which the system will search for available airports after clicking the "?" button.
Alternates	Gives a list of available Alternate airports, same as the ALTN dropdown fields on Flight Page (refer chapter 5.14).
Last Fuel Check	Waypoint of the last fuel check
EON*	Estimated ON time, i.e. ETA at the Scheduled Destination.
Apts within (bottom)	Radius in NM around the Last Fuel Check waypoint, in which the system will search for available airports after clicking the "?" button.
All*	Selecting the "All" button after a search (except with the "Alternates" button) will display additional columns in the search results: • Type – configurable mapping of authorized airport usage for the current flight's subtype (refer document [R3]) to a set of single-character flags • Svc – flags for available RFF (R), Customs (C) and Medical (M) services • RwyLen – longest runway, in feet
Destination	The chosen (highlighted) airport from the search results, or manually edited.
Divert Code*	Reason for the diversion for statistical purposes – this list is configurable.
Text box*	Free text comments about the diversion for statistical purposes.
Search Results	The heading of the search results list changes according to the type of search that was performed. • Apt – Airport ICAO code • Dist – GCD from the Scheduled Destination or Last Fuel Check, respectively the routing distance when searching with the "Alternates" button. Search results can be configured to only include airports with a specific authorization, e.g. those allowed as Emergency Alternates in FPM Administrator, but also any other authorization flag and combinations thereof can be used.

7.6.3 Diversion Desk Assignment

Last Revised: 2015-08-06

Follow the steps below to assign a diversion recovery flight to the appropriate desk:

1. **Dispatcher:** Notify the Dispatch Supervisor or the System Controller of a known diversion or unplanned fuel stop, as well as the ETA of the flight.
2. **System Controller**: Build the diversion leg. The diversion segment and continuation segment will be assigned in Movement Control.
   - Once the diversion segment has been created in Movement Control by the System Controller, it will show in FPM.

   Note

   When a diversion recovery flight or unplanned fuel stop is created in Movement Control, the System Controller does not have the ability to assign a specific flight to a desk; however, Dispatchers must assign a desk in FPM in order for the paperwork to be sent to the Flight Crew.
3. **Dispatch Supervisor (or Dispatcher):** Locate the flight in FPM and assign the flight to the appropriate desk.

Note

The FPM **SendBP** function is not available until the flight has been assigned to a desk. When building a new flight, a sector has to be assigned before the paperwork can be sent.

END OF TASK.