

DETERMINACION DE FALLOS EN LOS IRU

IRS -- TRAINING INFORMATION POINT - IRU DRIFT CALCULATIONS

General

The IRUs can calculate incorrect positions. This is called drift. If the IRU drift is large, you should change the IRU.

When the IRU is on the ground and not moving, sometimes the IRU still has ground speed. This ground speed is called residual ground speed. If the residual ground speed is large, you should change the IRU.

Drift Calculations

To calculate the IRU drift, you use the FMCS CDU. The FMC calculates the distance between waypoints on a route. You use this function to calculate the difference between your actual position and the position the IRUs show.

To calculate the drift, you must make sure that the flight crew does not turn off the IRUs after a flight. Note the latitude and longitude of both IRUs on the ISDU or on the CDU POS page 2. If the positions are different, you should do the drift calculation.

After you have the IRU positions, go to the route (RTE) page on the CDU. You use the route page to turn on the FMC route function. To turn on the route function, enter an origin or destination airport using the four letter ICAO identifier.

After you enter the airport, go to the LEGS page. The legs page is used to manually enter waypoints for a

route. Do not enter a route. Instead, enter the IRU positions and your actual position as waypoints. To enter the positions, do these steps:

- Line select or manually enter the position of IRU 1 into the scratch pad
- Make sure the position is correct
- Use LSK 1L to move the position to WPT01
- Manually enter your actual position into the scratch pad
- Use LSK 2L to move the position to WPT02
- Put IRU 2 position into WPT03.

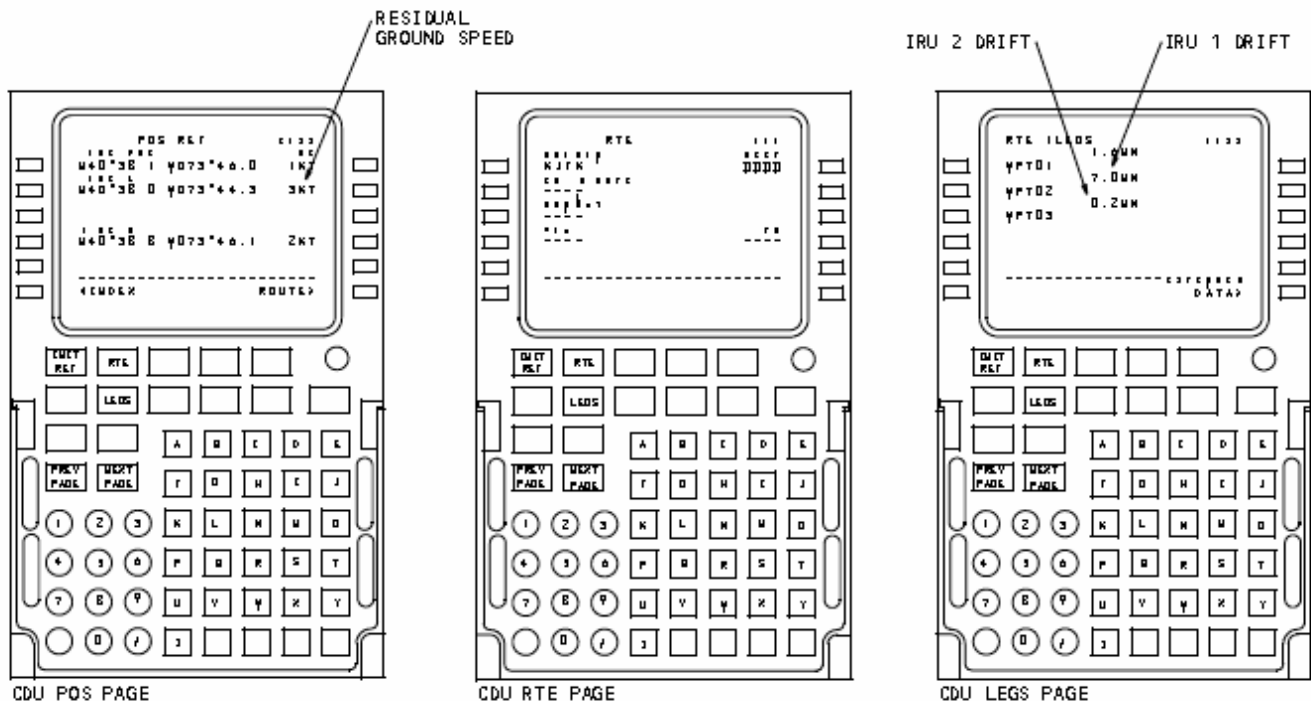
The FMC calculates the IRU drift in nautical miles. The drift shows on the CDU. The drift for IRU 1 shows as the distance from WPT01 to WPT02. The drift for IRU 2 shows as the distance from WPT02 to WPT03.

Use the drift distances and the position error chart to find if you need to change the IRU.

Residual Ground Speed

When the airplane is not moving, note the ground speed on the CDU POS page 2. If the residual ground speed is between 15 knots and 20 knots for two consecutive flights, you should change the IRU. If the residual ground speed is 20 knots or more after one flight, you should change the IRU.

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IRS -- TRAINING INFORMATION POINT - IRU DRIFT CRITERIA

General

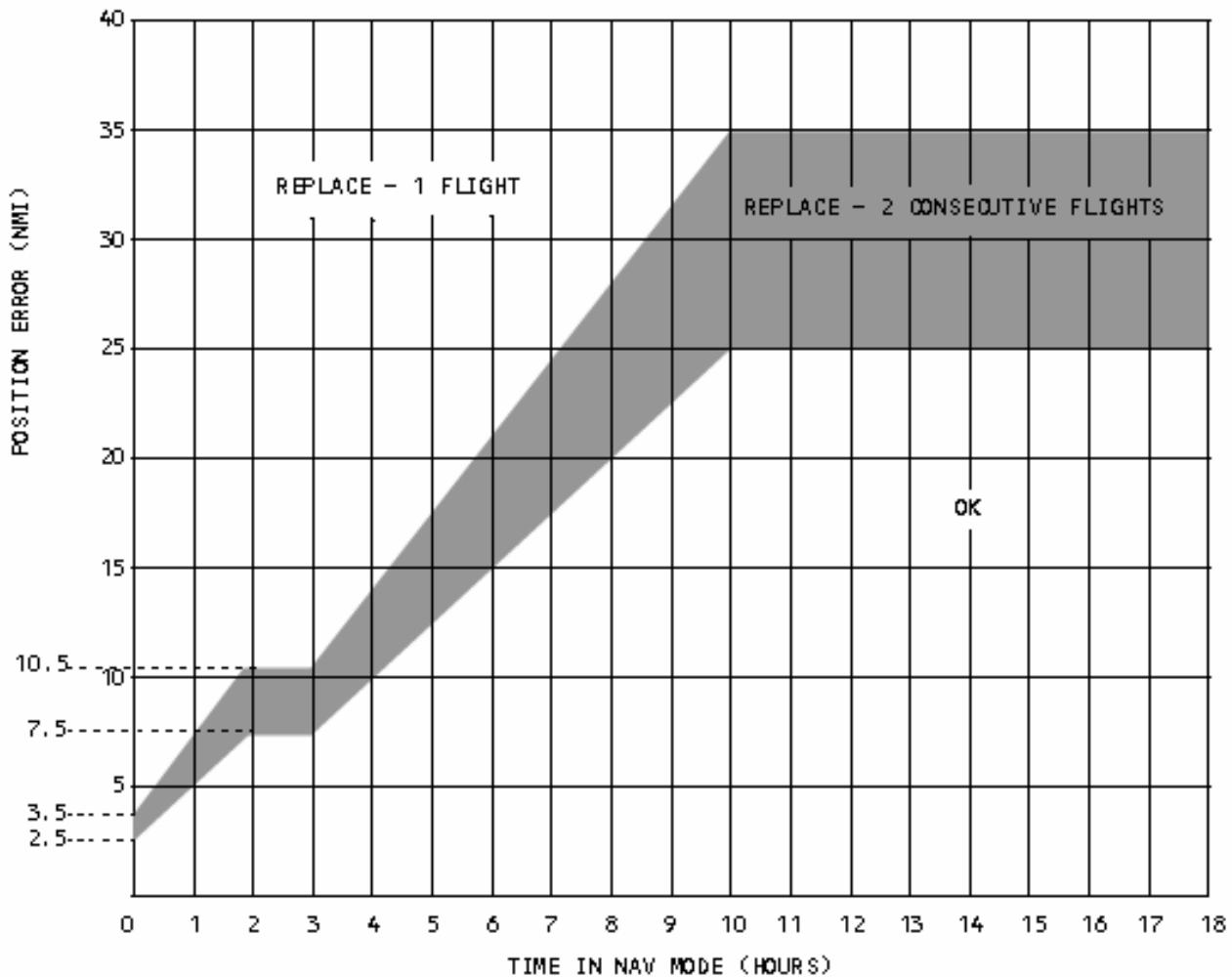
You use the position error chart to find the IRU drift.

Time In Navigation Mode

To use the position error chart, you must know the time that the IRU was in the navigation mode. The time is on the horizontal axis of the position error chart. If the flight crew did not do any new alignments, the time can be for multiple flight legs.

Drift Criteria

Use the drift from the CDU and the time in the navigation mode to find the drift on the position error chart. If the drift is below the shaded area, the drift is OK. If the drift is above the shaded area, you should change the IRU. If the drift is in the shaded area for two consecutive flights, you should change the IRU. Note that between the consecutive flights, you must do a new alignment.



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