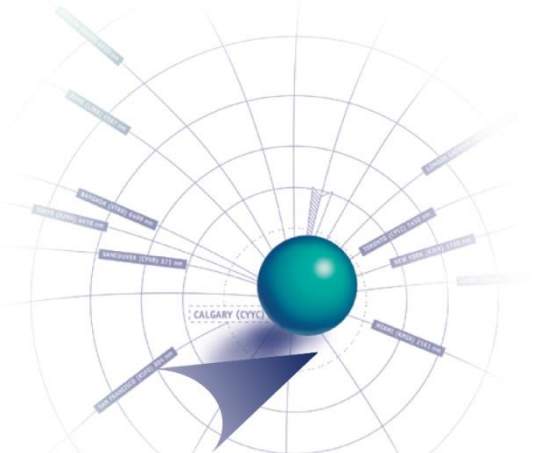
CTO Flight Planning

User Manual



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Sita YYCSKXH
Arinc YQFSKXH
Aftn CYYCXXSK

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2. Introduction

Overview

Welcome to the CTO Flight Planning System managed by Skyplan Services. Skyplan is a world leader in providing a full range of Flight Operations services. The CTO Flight Planning System has been developed to provide any aircraft operator with a quick and easy method for requesting Flight Plans.

The CTO Flight Planning System represents the latest design technology available in the aviation industry. It has been developed around the most advanced computer programming tools and the most efficient and cost effective hardware systems available in the market.

Just as important, the CTO Flight Planning System has been designed, developed and is maintained by a staff with extensive aviation Operations experience. Therefore, it has been designed to operate efficiently in a day-to-day operations environment as a support tool and not as a distraction to the operations staff. It has also been designed to be as user friendly as possible and requires minimal training to use.

This manual is designed to assist in the day-to-day use of the CTO Flight Planning System.

Any problems or service requirements should be directed to:

Skyplan Operations
Suite 104,
7777 10th Street N.E.
Calgary, Alberta, Canada
T2E 8X2

Telephone:	(403) 275-2511 (Direct)
	(800) 661-9189 (US Toll Free)
	(403) 275-3911 (Fax)
SITA:	YYCSKXH
ARINC:	YQFSKXH
AFTN:	CYYCXXSK
E-MAIL:	ops@skyplan.com
Website:	www.skyplan.com

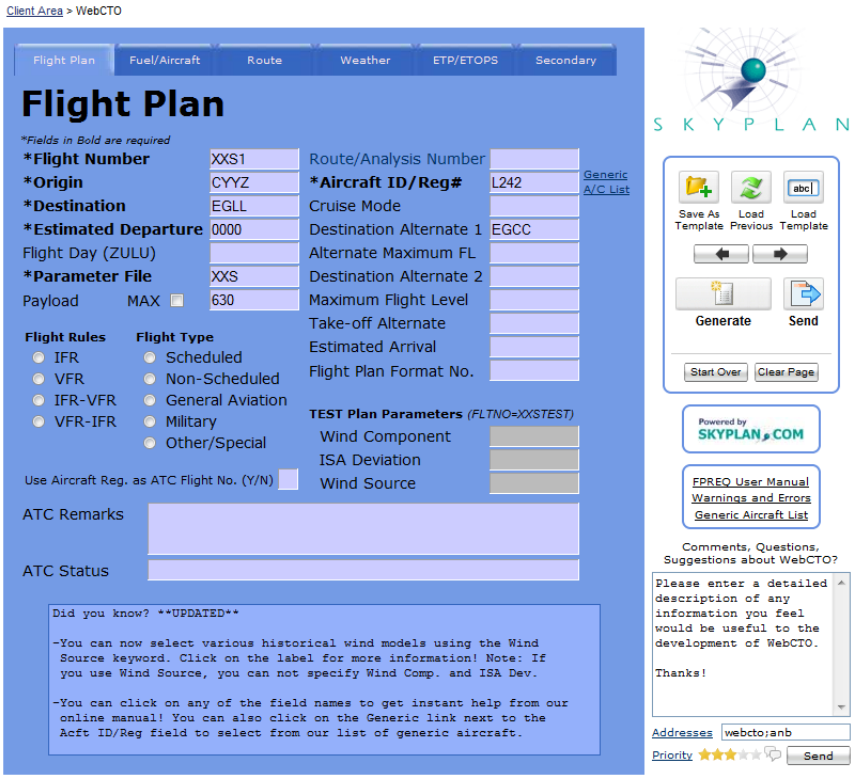
System Access

Access via WebCTO

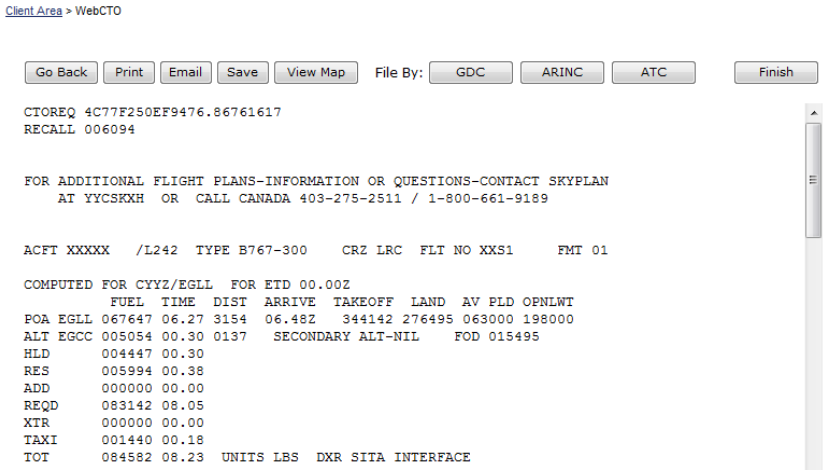
Accessing Skyplan's Flight Planning System via WebCTO (http://www.skyplan.com – Client Area).

Example:

You submit the following request via the Internet:



CTO Flight Planning System returns the following:



Access via SITA / ARINC

Accessing Skyplan's Flight Planning System via SITA or ARINC involves sending a Type B message with the appropriate Flight Planning keywords to the CTO Flight Planning System SITA or ARINC address. The requested Flight Plan will be returned to your SITA or ARINC address.

The following describes the structure of the Flight Plan request message:

- Destination Address: YYCSKXH (Sita) or YQFSKXH (Arinc)
- Originating Address: Your Sita or Arinc address
- Message Body:

Line 1:	FPREQ	(Note 1)
Line 2-N:	Valid Flight Planning keywords	(Note 2)

Note:

FPREQ stands for "Flight Plan Request". This keyword actually tells the system that you want to calculate a Flight Plan. This is a required keyword, as the system will not understand what you are trying to do unless you use this input. FPREQ is the access code to the CTO Flight Planning System.

The flight plan request is made of one or more keywords along with your input data.

Example:

You send the following message via the SITA or ARINC network:

```
QU YYCSKXH
.YOURADR 101231
FPREQ
FLTNO 33B/ORIG JFK/DEST CYQX/ALTN1 YYR/
ETD 2100/ACFT D001/PYLD 50/FMT 00/
EOR/
```

Note: Use address YQFSKXH to send your Flight Plan request via the ARINC network.

CTO Flight Planning System returns the following:

```
QU YOURADR
.YYCSKXH 101245 FPREQ

FOR ADDITIONAL FLIGHT PLANS - CONTACT SKYPLAN
AT YYCSKXH  -  YQLSKXH  OR  CALL CANADA 403-275-2511

ACFT XXXX    TYPE A300-B4   CRZ M78  FLT NO XXS33B   FMT 00

COMPUTED FOR KJFK/CYQX  FOR ETD 21.00Z
          FUEL  TIME  DIST ARRIVE TAKEOFF LAND   AV PLD
POA CYQX 026079 02.16 0964 23.38Z 254754  228675 005000
ALT CYYR 011915 01.01 0377 SECONDARY ALT-NIL    FOD 019775
HLD      005500 00.30
RES      002360 00.14
ADD      000000 00.00
REQD     045854 04.01
XTR      000000 00.00
TOT      045854 04.01  UNITS LBS  DXR SITA INTERFACE

WIND P003  MXSH 04  RTE 001

KJFK JFK6 BAYYS DCT BOS J575 YQY J577 RZ  CYQX
KJFK/0330/TUSKY/0370/

(FPL-XXS33B-IS
-EA30/H-SH/C
-KJFK2100
-N0447F330 JFK6 BAYYS DCT BOS/N0447F330 J575 YQY/M078F370 J577
 RZ DCT
-CYQX0216 CYYR
-EET/KZBW0003 CZQM0052 CZQX0145
 REG/XXXX SEL/ PER/M078)

RECALL 000123
```

Access via E-Mail

Accessing Skyplan's Flight Planning System via E-Mail involves sending a simple text message with the appropriate Flight Planning keywords to the CTO Flight Planning System E-Mail address. The requested Flight Plan will be returned to your E-Mail address.

The following describes the structure of the Flight Plan request message:

- E-Mail Address: Hosting@Skyplan.com
- Message Body:

Line 1:	FPREQ	(Note 1)
Line 2-N:	Valid Flight Planning keywords	(Note 2)

Note:

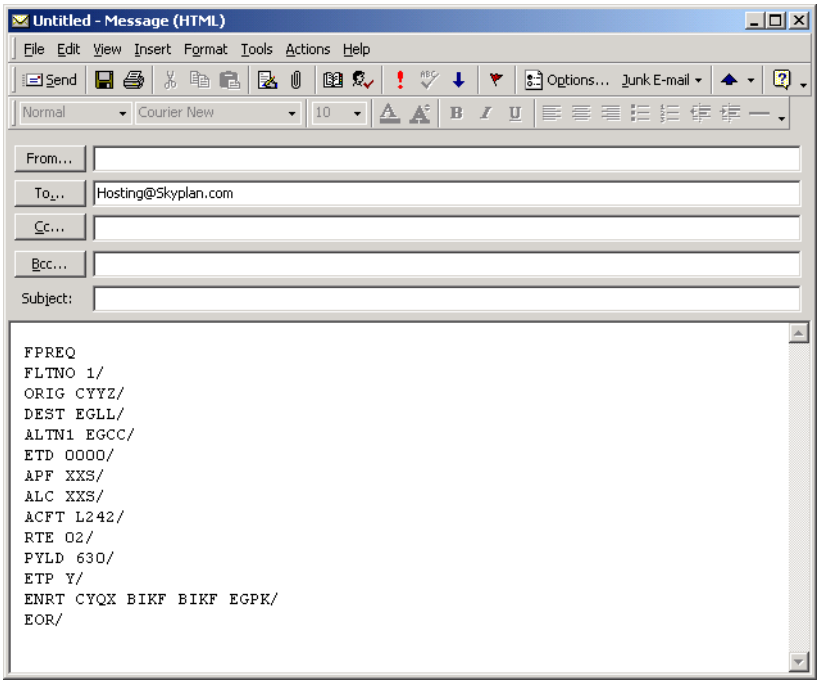
a) FPREQ stands for "Flight Plan Request". This keyword actually tells the system that you want to calculate a Flight Plan. This is a required keyword, as the system will not understand what you are trying to do unless you use this input. FPREQ is the access code to the CTO Flight Planning System.

b) The flight plan request is made of one or more keywords along with your input data.

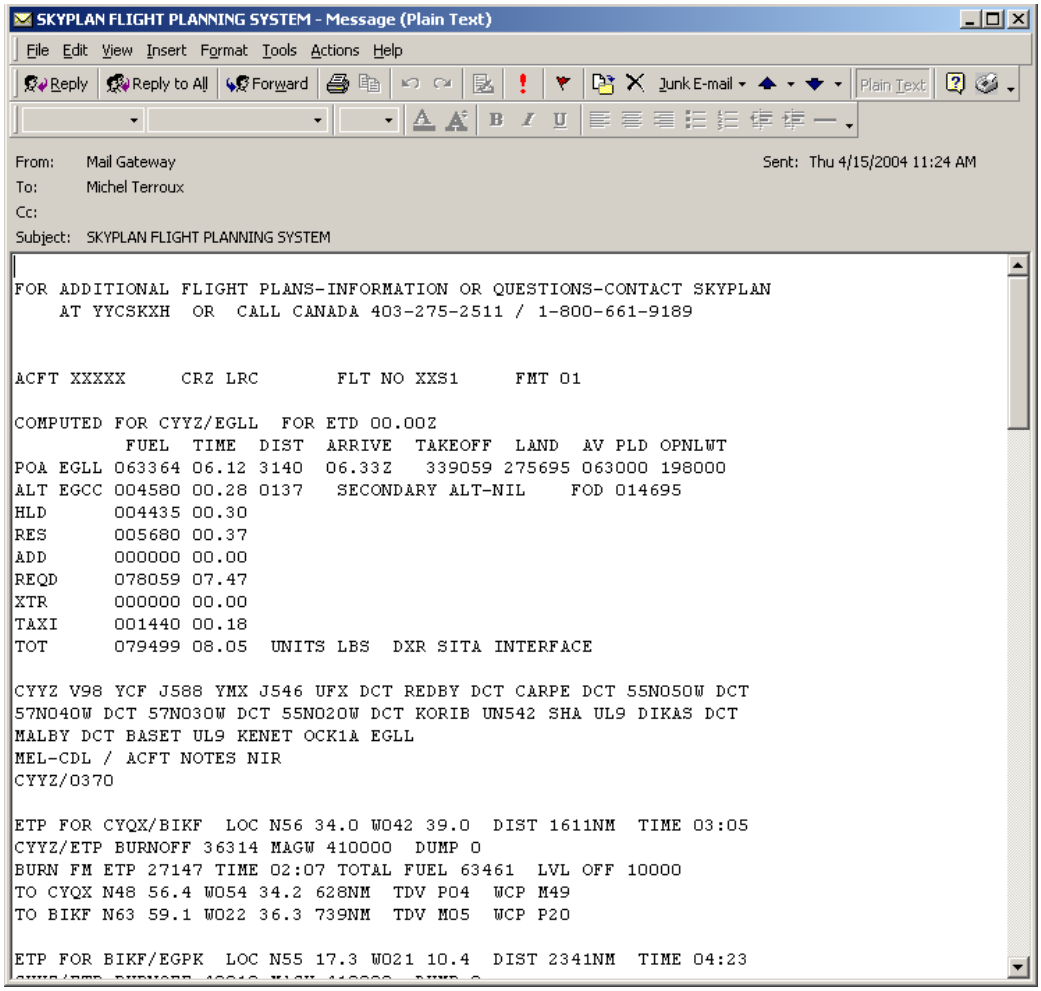
c) If requesting from a Pocket PC, included the /**DEVTYP PPC**/ keyword. This will instruct the Flight Planning system to return the Flight Plan as a file attachment so it can be viewed properly using "Word Mobile".

Example:

You send the following message via E-Mail:



CTO Flight Planning System returns the following:



Keyword Requirements (Access via SITA/ARINC/E-Mail only):

a) The "**FPREQ**" keyword must always appear by itself on the 1st line of the flight plan request.

b) There must always be a space between the keyword and your input data (i.e.: /**ORIG JFK**/). The space is required to tell the system that what follows is your input for the keyword.

c) Each keyword/input group must be followed by the symbol "**/**". This is a required input that separates each keyword/input group. NOTE: A keyword and its input can span more than one line.

d) The "**EOR**" keyword is required. It stands for "End of Request" and is required as the last keyword on the request message (don't forget the "**/**" after the "**EOR**"). This keyword lets the system know that you have completed your request and to begin its computation.

System Maintenance

At designated times during the day, the response time of the system may be slightly slowed for Weather/NOTAMs database maintenance.

Every 28 days, the Navigational Database (waypoints, airways, etc.) is updated to reflect the latest changes. The CTO Flight Planning system may be unavailable for a short period while these changes are applied.

System Weights

Your company's preferred weight settings are pre-stored in Skyplan's configuration settings. This will include whether you flight plan in POUNDS or KILOGRAMS, and whether you specify weights in units, hundreds, etc. To have these weight settings updated, please contact Skyplan Operations.

3. Flight Planning Concepts

Overview

The CTO Flight Planning System has been designed to be simple to use. With a minimum number of keywords, you will be provided with a state of the art Optimized Flight Plan.

This section provides a discussion of the following major components of the CTO Flight Planning System:

- Basic Flight Plan Request
- Route Selection
- Aircraft Operating Weights
- Fuel Specification
- Additional Alternates
- En-route Performance
- Weather Information
- Equal Time Points
- ATC Filing
- Reclear/Refile Operation
- TEST Flight Plan Request
- Secondary Flight Plan Request
- Flight Plan Macros
- ETOPS
- Flight Plan Recall Number
- Miscellaneous Keywords

Each sub-section will identify the required/optional keywords that are used to manipulate and override most of the system defaults. Examples are provided where applicable.

Please refer to the Flight Planning Keywords section for more information on all available keywords.

Basic Flight Plan Request

The following are the required keywords in order to request a Flight Plan:

/FLTNO xxxx/ Assigns a Flight Number to the Flight Plan

/ORIG xxxx/ Originating Airport (in IATA or ICAO format)

/DEST xxxx/ Destination Airport (in IATA or ICAO format). The destination airport can be the same as the origin airport (for training flight, sight-seeing flight, etc.).

/ALTN1 xxxx/ Primary Destination Alternate Airport (in IATA or ICAO format). En-route Time and Required Fuel to Alternate will be based on your company specifications. If this keyword is not specified, the system will default to the closest airport listed in the Alternate Airport File.

/ETD nnnn/ Estimated Time of Departure in GMT or "Zulu" time.

/ACFT xxxxxxxx/ Aircraft Identification. The input is either the Aircraft FIN number or Aircraft Registration. This keyword identifies the file that contains the performance data associated with this specific aircraft and its operating weight parameters.

/PYLD xxxx/ Actual or Estimated Payload, in your pre-stored preferred weight settings.

- Example using weight settings in100s of pounds :
  /PLYD 250/ = 25,000 pounds payload
- Example using weight settings in kilograms (to the unit) :
  /PYLD 1000/ = 1,000 kilogram payload

To compute a plan based on the Maximum Payload for the flight, use the /**PYLD MAX**/. The system will base its calculation on Maximum Takeoff Weight, Maximum Landing Weight, Maximum Zero Fuel Weight, or Maximum Fuel Capacity (which ever limit it reaches first).

Note: Use the **PAX**, **PAXWT**, **CARGO** keywords as an alternative way of specifying Payload.

/EOR/ This keyword is used to identify the end of the Flight Plan Request message.

Example:

Input Flight Plan Request:

```
FPREQ
FLTNO 7172/ORIG KJFK/DEST YYZ/ALTN1 YOW/ETD 2100/
ACFT D020/PYLD 250/FMT 00/
EOR/
```

Computed Flight Plan:

```
FOR ADDITIONAL FLIGHT PLANS-INFORMATION OR QUESTIONS-CONTACT SKYPLAN
AT YYCSKXH  -  YQLSKXH  OR  CALL CANADA 403-275-2511


ACFT D020       TYPE B737-2X6C    CRZ M74   FLT NO XXS7172  FMT 00

COMPUTED FOR KJFK/CYYZ  FOR ETD 21.00Z
          FUEL  TIME  DIST  ARRIVE  TAKEOFF  LAND  AV PLD OPNLWT
POA CYYZ 006621 01.05 0328  22.27Z   100821 094200 025000 062500
ALT CYOW 003933 00.37 0214   SECONDARY ALT-NIL    FOD 006700
HLD      002000 00.30
RES      000569 00.06
ADD      000000 00.00
REQD     013123 02.18
XTR      000198 00.02
TOT      013321 02.20  UNITS LBS  DXR SITA INTERFACE

WIND M039  MXSH 03  RTE 001

KJFK JFK6 GAYEL J95 BUF V36 CYYZ
KJFK/0350/

(FPL-XXS7172-IS
-B737/M-SH/C
-KJFK2100
-N0429F350 JFK6 GAYEL J95 BUFFY/M074F350 J95 BGM/N0429F350 J95 BUF
 V36
-CYYZ0105 CYOW
-EET/KZBW0007 KZNY0014 KZOB0035 CZYZ0052
 REG/D020 SEL/ PER/M074)

RECALL 000123
```

Route Selection

Five methods can be used to select an operational route:

a) *SYSTEM DEFAULT*: By not using the /**RTE**/ Keyword in your request input, the system will automatically select Route 1 (if: /**FLTNO TEST**/) or Analysis 1 (if: /**FLTNO 999**/ - valid flight number) - the best route for the given wind & temperature conditions associated with your ETD. If no pre-stored or company routes exist for the City-pair, the system will automatically build a Random Route. Note: If no routes are defined for ORIG-ORIG City-Pair, the system will NOT automatically create a route. Use the **VIA** or **RTEMAN** keywords, or contact Skyplan to have the route added to the Route database.

b) *SELECTING A PRESTORED OR COMPANY ROUTE*: To select your own Pre-stored Route, enter the specific Route Number you desire using your own route directory or by computing a ROUTE ANALYSIS. When inputting a Pre-stored Route Number in your flight plan request message, the Route Number MUST be preceded by the letter "R". Example: /**RTE R03**/.

c) *SELECTING A ROUTE USING ROUTE ANALYSIS*: To review and/or compare the routes stored for a proposed ETD, a ROUTE ANALYSIS can be computed. The output will show, in order, how the routes stored in the database are affected by the forecast en-route weather conditions for your ETD. To select a route based on the ROUTE ANALYSIS METHOD, the ANALYSIS NUMBER must be used in the input request. Example: /**RTE A03**/.

d) *RANDOM ROUTE VIA WAYPOINT(S)*: Use the **VIA** keyword to request an ADHOC Random Routing via one or more specific waypoints. Each waypoint specified must be a valid waypoint that is accessible between the ORIG and DEST airports. Example: /**VIA DAGTY YBR-CY**/.

e) *DIRECT ROUTE*: Use the **RTE** keyword with the **DCT** value to request a DIRECT Routing between the ORIG and DEST airports. Example: /**RTE DCT**/.

f) *MANUAL ROUTE STRING*: Use the **RTEMAN** keyword to request an ADHOC Routing via one or more specific waypoints/Airways. Each waypoint/airway specified must be valid between the ORIG and DEST airports. Example: /**RTEMAN HUSAR.J504.YEA.MTTA.YVV.J531.YMS-CY**/.

The following describe the keywords associated with Route Selection:

/RTE nnn/ Per your company requirements, a number of routes may be pre-stored for a given city pair. Each route is assigned an identifier (R01, R02, R03, etc.) and may be selected for your flight plan. A listing of your existing stored routes should be available at your work location or can be obtained by requesting a ROUTE ANALYSIS Listing. Also note that the letter "R" MUST be input before the route number. If the letter "R" is not used, the system will compute a flight plan based on an internal organization of routes using forecast en-route weather conditions (ROUTE ANALYSIS).

/RTECRZ nn/ Request a fixed Mach value to be used during the Route Analysis. If omitted, the Route Analysis will assume the fixed Mach specified by the /**CRZ** / keyword. If this cruise setting is not a fixed speed, the Route Analysis will use the default fixed Mach setting for the aircraft type.

Example 1:

Specified RTECRZ with fixed CRZ flight speed which differs.

CRZ 72/
RTECRZ 75/

This will produce a route analysis at M75 but the flight plan at M72.

Example 2:

Specified RTECRZ with variable CRZ profile.

CRZ LRC/
RTECRZ 75/

This will produce a route analysis at M75 but the flight plan at LRC.

Example 3:

Specified fixed CRZ flight speed, RTECRZ omitted.

CRZ 72/
(no **RTECRZ** keyword specified)

This will produce a route analysis at M72 and the flight plan at M72.

Example 4:

Specified variable CRZ profile, RTECRZ omitted.

CRZ LRC/
(no **RTECRZ** keyword specified)

This will produce a route analysis at the default fixed Mach setting for the aircraft type and the flight plan at LRC.

/RTEDTL x/ Request a Route Analysis Listing of all the pre-stored routes for the city pair you are flight planning. The Route Analysis will sort the routes in order of flight time for the forecast wind and temperature conditions for your ETD. To Suppress the Flight plan and obtain ONLY the Route Analysis Listing, input /**RTEDTL S**/. To Include the Route Analysis Listing as part of the Flight Plan, input /**RTEDTL Y**/.

/VIA xxxxxx/ Request a Random Route via one or more Waypoints. Example: /**VIA DAGTY YBR-CY**/.

/RTEMAN xxxxxx/ Request a Fixed Route via one or more Waypoints/Airways. Example: /**VIA HUSAR.J504.YEA.MTTA.YVV.J531.YMS-CY** /.

/RTEMEA x/ Enable Route Altitude Compliance Check. Specify "**Y**" to check compliance using MEA. Specify "**R**" to use MORA, or "**C**" to use MOCA.

/RTETRK xxx/ Request a list of Track Routes for a specified Track Structure. Example: /**RTETRK NAT**/.

/RTEXFIR xxx/ Request a Route which avoids a list of FIRs (max 3). If a Fixed Route is requested (i.e.: RTE R01), the system will perform a compliance check and report any FIRs which the route overflies. If a Random Route is requested (MTTA), the system will attempt to generate a route which avoids the requested FIRs. Example: /**RTEXFIR CZWG**/.

Note: FIR avoidance will make a best effort to route around the specified FIR(s), but complete avoidance of the FIR(s) is not guaranteed.

The following examples illustrate the usage of each keyword:

a) **RTE** Keyword:

Input Flight Plan Request:

```
FPREQ
FLTNO 7172/ORIG KJFK/DEST YYZ/ALTN1 YOW/ETD 2100/
ACFT D020/PYLD 250/RTE R03/FMT 00/
EOR/
```

Computed Flight Plan with requested Fixed Route:

```
FOR ADDITIONAL FLIGHT PLANS-INFORMATION OR QUESTIONS-CONTACT SKYPLAN
    AT YYCSKXH  OR  CALL CANADA 403-275-2511 / 1-800-661-9189

ACFT D020       TYPE B737-2X6C    CRZ M74   FLT NO XXS7172  FMT 00

COMPUTED FOR KJFK/CYYZ  FOR ETD 21.00Z
          FUEL  TIME  DIST  ARRIVE  TAKEOFF  LAND  AV PLD OPNLWT
POA CYYZ 006621 01.05 0328  22.27Z   100821 094200 025000 062500
ALT CYOW 003933 00.37 0214   SECONDARY ALT-NIL    FOD 006700
HLD      002000 00.30
RES      000569 00.06
ADD      000000 00.00
REQD     013123 02.18
XTR      000198 00.02
TOT      013321 02.20  UNITS LBS  DXR SITA INTERFACE

WIND M039  MXSH 03  RTE R03  <---- ROUTE NUMBER

KJFK JFK6 GAYEL J95 BUF V36 CYYZ
...
...
...

RECALL 000123
```

b) **RTEDTL** Keyword:

Input Flight Plan Request:

```
FPREQ
FLTNO 072/ORIG IST/DEST EDDH/ALTN1 FRA/ETD 2300/
ACFT GUL/PYLD 400/RTEDTL S/EOR/
```

Route Analysis:

```
-------------------------  ROUTE ANALYSIS  -------------------------

FLIGHT XXS 0072/20   LTBA-EDDH    ETD 202300   Fin GUL    Mach 0.80

(a)             (b)  (c)   (d)       (e)        (f)       (g)
A01 - LTBA-EDDH-R01  M013  2+46  Rte 1159  G/C  1072  Cap UNL

(h)  + LTBA D356G FENER VADEN LOMOS DIROM MOKRU TUNET PERUT DEGET
       ABONY TPS PATAK LALES DOBIL BULEK LEMBI HDO ESLOR RENDO
       OSKAN OLBIK BOLBO MOSEX ESIKA SOBLU SOGMA GARMA BKD RODOG
       RATIP LUB LBE EDDH

(i)  + LTBA FENE1U FENER UA16 VADEN UL860 LOMOS UN133 MOKRU UP184
       DEGET UY553 ABONY UY558 TPS UL617 PATAK UL602 LALES UT42
       DOBIL UY444 HDO UM748 BKD T902 RATIP RATI1A EDDH

(j)  + MTTA

A02 - LTBA-EDDH-R03  MO13  2+44  Rte 1184  G/C  1072  Cap 290

       +  LTBA .........
...
...
...

                (k)
Wind Forecast 200024

-------------------------  END OF REPORT  -------------------------

RECALL 000123
```

DECODE:

a) Route ANALYSIS number (Input Keyword: /**RTE A01**/ or /**RTE 01**/)
b) PRESTORED or COMPANY Route number (Input Keyword: /**RTE R05**/)
c) Wind component
d) Time en-route
e) Route mileage
f) Great Circle mileage
g) Flight Level Cap
h) Flight Plan Route detail
i) ATC routing
j) Remarks
k) Wind Forecast

c) **VIA** Keyword:

Input Flight Plan Request:

```
FPREQ
FLTNO 7172/ORIG KJFK/DEST YYZ/ALTN1 YOW/ETD 2100/
ACFT D020/PYLD 250/VIA PSB BUF/FMT 00/
EOR/
```

Computed Flight Plan:

```
FOR ADDITIONAL FLIGHT PLANS-INFORMATION OR QUESTIONS-CONTACT SKYPLAN
    AT YYCSKXH  OR  CALL CANADA 403-275-2511 / 1-800-661-9189

ACFT XXXX       TYPE B737-2X6C    CRZ M74   FLT NO XXS7172  FMT 00

COMPUTED FOR KJFK/CYYZ  FOR ETD 21.00Z
          FUEL  TIME  DIST  ARRIVE  TAKEOFF  LAND  AV PLD OPNLWT
POA CYYZ 006906 01.08 0395  22.29Z   101106 094200 025000 062500
ALT CYOW 003509 00.35 0196   SECONDARY ALT-NIL    FOD 006700
HLD      002000 00.30
RES      000615 00.07
ADD      000000 00.00
REQD     013030 02.20
XTR      000576 00.06
TOT      013606 02.26  UNITS LBS  DXR SITA INTERFACE

WIND M023  MXSH 04  RTE MAN

                          +-------------- VIA Waypoint 1
                          |       +------ VIA Waypoint 2
                          |       |
KJFK SID1 RBV J64 RAV DCT PSB J61 BUF V36 CYYZ
KJFK/0310/

(FPL-XXS7172-IS
-B737/M-SH/C
-KJFK2100
-N0436F310 DCT RBV J64 RAV DCT PSB J61 SLT10/N0435F310 J61 BUF V36
-CYYZ0108 CYOW
-EET/KZOB0036 CZYZ0058
 REG/XXXX SEL/ PER/M074)

RECALL 000123
```

d) **RTEMAN** Keyword:

Input Flight Plan Request:

```
FPREQ
FLTNO 7172/ORIG CYYC/DEST CYYZ/ALTN1 YTZ/ETD 2300/
ACFT K001/RTEMAN HUSAR.J504.YEA.MTT.YVV.J531.YMS-CY/FMT 00/
EOR/
```

Computed Flight Plan:

```
FOR ADDITIONAL FLIGHT PLANS-INFORMATION OR QUESTIONS-CONTACT SKYPLAN
    AT YYCSKXH  OR  CALL CANADA 403-275-2511 / 1-800-661-9189

ACFT XXXXX      TYPE G4-SP        CRZ M80   FLT NO XXS7172  FMT 00

COMPUTED FOR CYYC/CYYZ  FOR ETD 23.00Z/06APR
          FUEL  TIME  DIST  ARRIVE  TAKEOFF  LAND  AV PLD OPNLWT
POA CYYZ 008198 03.02 1461  02.25Z   055592 047394 000000 043000
ALT CYTZ 001000 00.06 0025   SECONDARY ALT-NIL    FOD 004394
HLD      002687 00.30
RES      000707 00.18
ADD      000000 00.00
REQD     012592 03.56
XTR      000000 00.00
TAXI     000075 00.05
TOT      012667 04.01  UNITS LBS  DXR SITA INTERFACE

WIND P050  MXSH 03  RTE MAN

CYYC DCT HUSAR J504 YDR DCT VBI J500 SSM J531 YMS DCT CYYZ
CYYC/0410/YEA/0450

(FPL-XXSMCT1-IS
-GLF2/M-SD/C
-CYYC2300
-N0458F410 DCT HUSAR J504 YEA/N0460F450 J504 YDR DCT VBI J500 SSM
 J531 YMS DCT
-CYYZ0259 CYTZ
-EET/CZWG0022 KZMP0159 CZYZ0222
 REG/XXXXX SEL/ PER/M080)


RECALL 009854
```

e) **RTEMEA** Keyword:

Input Flight Plan Request:

```
FPREQ
FLTNO 7172/ORIG CYVR/DEST CYYC/ALTN1 YEG/ETD 0100/
ACFT L545/RTE R01/FL 170/RTEMEA Y/
EOR/
```

Computed Flight Plan:

```
WARNING - RTE Leg HOWZR      CYE-OPALE      CYE FL[150] under MORA[155]

FOR ADDITIONAL FLIGHT PLANS-INFORMATION OR QUESTIONS-CONTACT SKYPLAN
    AT YYCSKXH  OR  CALL CANADA 403-275-2511 / 1-800-661-9189

ACFT XXXXX     CRZ LRC       FLT NO DEVMCT2  FMT 02

COMPUTED FOR CYVR/CYYC  FOR ETD 01.00Z
          FUEL  TIME  DIST  ARRIVE  TAKEOFF  LAND  AV PLD OPNLWT
POA CYYC 003294 01.15 0381  02.28Z   056894 053600 000000 050600
ALT CYEG 001433 00.29 0140   SECONDARY ALT-NIL    FOD 003000
HLD      000000 00.00
RES      000000 00.00
ADD      000000 00.00
REQD     004727 01.44
XTR      001567 00.36
TAXI     000167 00.10
TOT      006461 02.30  UNITS LBS  DXR SITA INTERFACE

CYVR YVR4 FERRY V300 HE B13 LW DCT HOWZR DCT OPALE OPALE9 CYYC
MEL-CDL / ACFT NOTES NIR
CYVR/0150
WIND P051  MXSH 08  RTE R01

CPT       FL   SOT  TAS WIND   AW   COMP ZD  ZT  ETA/ATA  CT  ZF  REM
           LAT     LONG         MT  MH

CYVR       N4911.1 W12310.4

TOC       CLB 01CLB 296 24429 DCT   M11 004 0.01 .. / .. 0.04 00519
           N4906.9 W12309.5     152 157                        005775

YVR       150 01M11 280 26861 DCT   P00 003 0.00 .. / .. 0.04 00024
115.90     N4904.4 W12308.9     151 163                        005751

...
...
...
HOWZR     150 01M10 280 27861 DCT   P56 124 0.23 .. / .. 0.55 00968
           N5032.1 W11616.1     058 053                        003520

TOD       150 01M10 272 28357 DCT   P45 043 0.08 .. / .. 1.03 00351
           N5048.1 W11511.8     050 042                        003169

OPALE     DSC 01DSC 364 28552 DCT   P40 009 0.01 .. / .. 1.04 00018
           N5051.2 W11459.6     051 046                        003151
...
...
...
(FPL-DEVMCT2-IS
-GLEX/M-SDGHIWXY/S
-CYVR0100
-N0280A150 YVR4 FERRY V300 HE B13 LW DCT HOWZR DCT OPALE OPALE9
-CYYC0112 CYEG
-EET/CZEG0055
 REG/XXXXX PER/M044)

RECALL 007821
```

f) **RTETRK** Keyword:

Input Flight Plan Request:

```
FPREQ
FLTNO 7172/ORIG CYYZ/DEST EGKK/ETD 2100/
ACFT K040/PYLD 250/RTETRK NATE/
EOR/
```

Computed Flight Plan with requested Fixed Route:

```
FOR ADDITIONAL FLIGHT PLANS-INFORMATION OR QUESTIONS-CONTACT SKYPLAN
    AT YYCSKXH  OR  CALL CANADA 403-275-2511 / 1-800-661-9189

ACFT XXXXX     CRZ LRC       FLT NO XXS7172  FMT 01

COMPUTED FOR CYYZ/EGKK  FOR ETD 21.00Z
          FUEL  TIME  DIST  ARRIVE  TAKEOFF  LAND  AV PLD OPNLWT
POA EGKK 032926 06.27 3156  03.48Z   185402 152476 025000 121000
ALT EGLL 001591 00.15 0071   SECONDARY ALT-NIL    FOD 006476
HLD      002175 00.30
RES      002710 00.38
ADD      000000 00.00
REQD     039402 07.50
XTR      000000 00.00
TAXI     001800 00.18
TOT      041202 08.08  UNITS KGS  DXR SITA INTERFACE
...
...
...
---------------------------------
NORTH ATLANTIC TRACKS - EASTBOUND
---------------------------------

TRACK....: V
WAYPOINTS: DOTTY CRONO 52N050W 54N040W 54N030W 54N020W DOGAL BABAN
EAST FL..: 320 330 340 350 360 370 380 390 400
ENTRY....: N109B  N113B  N115B
EXIT.....: EAST
VALID....: 08/26-0100 TO 08/26-0800

TRACK....: W
WAYPOINTS: CYMON DENDU 51N050W 53N040W 53N030W 53N020W MALOT BURAK
EAST FL..: 320 330 340 350 360 370 380 390 400
ENTRY....: N93B   N97B   N99A
EXIT.....: EAST
VALID....: 08/26-0100 TO 08/26-0800
...
...
...
STRUCTURE COMMENTS:
1.TRACK MESSAGE IDENTIFICATION NUMBER IS 238 AND OPERATORS ARE
  REMINDED TO INCLUDE THE TMI NUMBER AS PART OF THE OCEANIC
  CLEARANCE READ BACK.
2.CLEARANCE DELIVERY FREQUENCY ASSIGNMENTS FOR AIRCRAFT OPERATING
  FROM MOATT TO BOBTU INCLUSIVE:
   MOATT TO LOACH 128.7
   YQX   TO VIXUN 128.45
   YYT   TO BOBTU 119.42
3.80 PERCENT OF GROSS NAVIGATIONAL ERRORS RESULT FROM POOR COCKPIT
  PROCEDURES. ALWAYS CARRY OUT PROPER WAYPOINT CHECKS.
4.OPERATORS SHOULD NOTE THAT NERS IDENTIFIER IS NOT TO BE INCLUDED
  IN FIELD 15 OF THE FLIGHT PLAN UNDER ANY CIRCUMSTANCES.
5.PERMANENT NAT FLIGHT PLANNING RESTRICTIONS IN FORCE FOR AIRCRAFT
   TRANSITING BETWEEN NEW YORK OCEANIC AND CANADIAN DOMESTIC
   AIRSPACE. REFER TO NOTAM CZQX A5922/05
6.ALL OPERATORS ARE REMINDED OF THE NECESSITY TO PROVIDE VOICE
  REPORTS OF ANY OBSERVED NON ROUTINE WEATHER PHENOMENA.
```

g) **RTEXFIR** Keyword:

Input Flight Plan Request:

```
FPREQ
FLTNO 7172/ORIG CYEG/DEST CYYU/ALTN1 CYTS/ETD 0100/
ACFT L545/RTE R01/RTEXFIR CZWG/
EOR/
```

Computed Flight Plan:

```
WARNING - RTE violates FIR CZWG avoidance

FOR ADDITIONAL FLIGHT PLANS-INFORMATION OR QUESTIONS-CONTACT SKYPLAN
    AT YYCSKXH  OR  CALL CANADA 403-275-2511 / 1-800-661-9189

ACFT XXXXX     CRZ LRC       FLT NO DEV7172  FMT 01

COMPUTED FOR CYEG/CYYU  FOR ETD 01.00Z  ATCFRULE IFR
          FUEL  TIME  DIST  ARRIVE  TAKEOFF  LAND  AV PLD OPNLWT
POA CYYU 007018 02.41 1190  03.49Z   060618 053600 000000 050600
ALT CYTS 001000 00.14 0066   SECONDARY ALT-NIL    FOD 003000
HLD      000000 00.00
RES      000000 00.00
ADD      000000 00.00
REQD     008018 02.55
XTR      002000 00.50
TAXI     000083 00.05
TOT      010101 03.50  UNITS LBS  DXR SITA INTERFACE

CYEG CYEG3 RYLEY DCT YLL DCT YPA DCT YRL DCT YGQ DCT YYU CYYU
MEL-CDL / ACFT NOTES NIR
CYEG/0450
WIND P017  MXSH 03  RTE R01 SRC AVN

CPT       FL   SOT  TAS WIND   AW   COMP ZD  ZT  ETA/ATA  CT  ZF  REM
           LAT     LONG         MT  MH

CYEG       N5318.6 W11334.7

RYLEY     CLB 03CLB 359 30715 DCT   P12 045 0.09 .. / .. 0.09 01196
           N5316.4 W11219.2     075 074                        008822

TOC       CLB 00CLB 464 29013 DCT   P12 071 0.09 .. / .. 0.18 00576
                              071 071                        008246

YLL       450 01M51 456 25407 DCT   P07 009 0.02 .. / .. 0.20 00053
241        N5318.8 W11004.9     072 073                        008193

YPA       450 01M50 457 24812 DCT   P11 159 0.20 .. / .. 0.40 00847
113.00     N5313.0 W10540.0     077 078                        007346

YRL       450 01M50 456 25218 DCT   P15 457 0.58 .. / .. 1.38 02420
114.00     N5104.3 W09345.7     098 099                        004926
...
...
...
(FPL-DEV7172-IS
-GLEX/M-SDGHIWXY/S
-CYEG0100
-N0456F450 CYEG3 RYLEY DCT YLL DCT YPA DCT YRL DCT YGQ DCT YYU DCT
-CYYU0238 CYTS
-EET/CZWG0020 CZYZ0213
 REG/XXXXX PER/M078
-E/0343 P/TBN)

RECALL 007821
```

Aircraft Operating Weights

Your aircraft operating weight information is pre-stored in Skyplan's Flight Planning System. The following are the optional keywords that allow you to override your aircraft's operating weight:

/CONF n/ Different Empty Operating Weights may be pre-stored for each aircraft configuration. Example of inputs:

/CONF 0/ = Passenger
/CONF 1/ = Cargo
/CONF 2/ = Combi

In no input, the system will automatically select configuration "0".

/EOW nnnn/ Allows the user to OVERRIDE stored Empty Operating Weight or the stored Empty Operating Weights accessible under Keyword "**CONF**". Example using weight settings in pounds:

/EOW 170300/ = 170,300 pounds Empty Op Weight

If **EOW** input is not specified, the system will use the Empty Operating Weight that is pre-stored in the system.

/MTOW nnnn/ Allows the user to override the Maximum STRUCTUAL Takeoff Wt stored in the system to accommodate restricted runway length/temp/altitude operations. Example using weight settings in hundreds of kilograms:

/MTOW 1473/ = 147,300 kg Max Takeoff weight

Can also be used as a method to block the system from exceeding this weight or, in conjunction with Keyword "/**PYLD MAX**/", to determine the maximum payload possible.

/MLW nnnn/ Allows the user to override the Maximum Landing Weight stored in the Aircraft Database to accommodate restricted runway length, etc. Example using weight settings in hundreds of pounds:

/MLW 2450/ = 245,000 pounds Max Landing Weight

/ETOW nnnn/ Allows the user to specify the Estimated Take-Off weight of the aircraft. In most cases, this keyword is not required - the system will automatically compute the take-off weight with the least amount of fuel required. In some cases where more fuel is on the aircraft than is actually required for the flight, it will be necessary to specify the actual takeoff weight in order to generate an accurate flight plan. An example of this would be if the destination has been changed to some place closer after the aircraft was fuelled.

/ZFW nnnn/ Allows the user to specify the Zero Fuel Weight of the aircraft including payload. The system will calculate the Payload from the Aircraft's Empty Operating Weight. Examples:

/ZFW 800/ = 80,000 Operating Empty Weight
/ZFW MAX/ = request Max Payload calculation

Use the "**MAX**" option to let the system calculate the Maximum Payload to be carried.

Note: Total payload cannot exceed the Empty Zero Fuel Weight (EZFW) of the aircraft.

Fuel Specification

The following are the optional keywords that allow you to specify specific fuelling requirements:

/MLF nnn/ Overrides pre-stored minimum fuel loaded in database. Allows for landing with a specific amount of fuel onboard. Example using weights in hundreds of kilograms:

/MLF 337/ = Land with 33,700 kilograms of total fuel remaining onboard.

/ADF nnn/ Allows user to add additional or Extra Fuel to the flight plan due to poor weather conditions or estimated ATC delays. Example using weights in pounds:

/ADF 5000/ = 5,000 pounds of extra fuel.

/RMPF nnnn/ Allows user to specify the Total Fuel on board before engine start-up (i.e.: Total Ramp Fuel). Example using weights in hundreds of pounds:

/RMPF 300/ = 30,000 pounds of total fuel on board.

/TKF nnn/ Allows for additional fuel to be tankered to a specific amount or to a MAXIMUM amount based on aircraft weight limits. Example:

/TKF 150/ = 15,000 additional fuel.
/TKF MAX/ = Maximum fuel for the flight.

/CITM nn/ To override the default Circuit Time at Origin (in minutes). Example:

/CITM 7/ = 7 minutes maneuvering fuel.

/CITMD nn/ To override the default Circuit Time at Destination (in minutes). Example:

/CITMD 5/ = 5 minutes maneuvering fuel.

/TXTM nn/ To override the default Taxi Time at Origin (in minutes). Example:

/TXTM 10/ = 10 minutes of Taxi fuel.

/RSVTYP nnn/ To override the default Reserve/Hold policy. Example:

/RSVTYP 43/ = No Reserves, No Hold.

/RSVFUEL nnn/ To specify a Fixed Reserve Fuel. Example:

/RSVFUEL 10/ = 1000 reserve fuel.

/HLDTM nnn/ To override the default time (30 minutes) to Hold over the Destination Airport.. Example:

/HLDTM 45/ = 45 minutes of Hold fuel.

/ HLDFL nnn/ To override the default Flight Level (1,500 feet) to Hold over the Destination Airport.. Example:

/ HLDFL 100/ = 10,000 feet.

Additional Alternates

The following are the optional keywords that allow you to specify additional alternate airports:

/ALTNFL nnn/ This input is used to cap or provide a Maximum Altitude Limit for the Route to Alternate 1. Example:

/ ALTNFL 090/ = Capped at 9,000 Feet.
/ ALTNFL 330/ = Do not exceed altitude of FL330.
/ ALTNFL 282/ = Do not exceed altitude of FL282 (equiv to 8600 meters).
/ ALTNFL UNL/ = Do not cap the Alternate Route.

/ALTN2 xxxx/ Secondary Destination Alternate airport (in IATA or ICAO format). Note: Must not be farther than the Primary Destination Alternate airport (**ALTN1** keyword).

/TALTN xxxx/ Used to specify an Alternate for the originating airport (in IATA or ICAO format). Note that the Takeoff Alternate must be within a range of 500 nautical miles for 2 engine aircraft and 1000 nautical miles for 3/4 engine aircraft from the departure airport.

En-route Performance

The following are the optional keywords that allow you to override the en-route operating characteristics of the flight:

/ALTPROF xxx/ This input provides a desired flight level for the flight plan between specific waypoints along the planned route.

Example:

/ALTPROF GTK 280/ = Attempt to achieve altitude of FL280 from waypoint GTK to Destination.

/ALTPROF GTK 310 COSMO/ = Attempt to achieve altitude of FL310 from waypoints GTK to COSMO.

/ALTPROF UM 282 PK/ = Attempt to achieve altitude of FL282 from waypoints UM to PK (equivalent to 8600 meters).

/ALTPROF 075/ = Attempt to achieve altitude of when using a DIRECT route (**/RTE DCT/**).

/ALTPROF CYYC 075/ = Attempt to achieve altitude of FL075 from Origin to Destination.

/CRZ xxx/ This input is used to override the Primary Cruise Speed that is pre-stored for your aircraft in the performance database. Inputs can be a fixed Mach value, Long Range Cruise or a customized value (i.e.: HSC).

Note: The system will automatically use lower Mach number(s) and/or LRC cruise data if it cannot use the selected Mach number for the cruise portion of the flight. A warning message will be displayed if this is the case.

Example:

/CRZ LRC/ = Long Range Cruise
/CRZ HSC/ = High Speed Cruise
/CRZ 80/ = Mach .80

/FL nnn/ This input is used to cap or provide a Maximum Altitude Limit for the flight plan. Example:

/FL 090/ = Capped at 9,000 Feet.
/FL 330/ = Do not exceed altitude of FL330.
/FL 282/ = Do not exceed altitude of FL282 (equiv to 8600 meters).
/FL UNL/ = Do not cap the flight. Use when the Route has a pre-defined Flight CAP. Same as **/FL 0/**.

/CLBB n.nnn/ This input is used to override the bias percentage for Climb fuel burn that is pre-stored for your aircraft in the Aircraft database. Example:

/CLBB 0.950/ = Climb Bias percentage

/CLBFUELB nnnn/ This input is used to override the bias fixed fuel for Climb fuel burn that is pre-stored for your aircraft in the Aircraft database. This value is always in pounds or kilograms (never in hundreds). Example:

/CLBFUELB 100/ = 100 pounds of Climb Bias fuel

/CLBTIMEB nn/ This input is used to override the bias time for Climb fuel burn that is pre-stored for your aircraft in the Aircraft database. Example:

/CLBTIMEB 10/ = Climb Bias time

/CRZB n.nnn/ This input is used to override the bias for Cruise fuel burn that is pre-stored for your aircraft in the Aircraft database. Example:

/CRZB 1.010/ = Cruise Bias percentage

/DSCB n.nnn/ This input is used to override the bias for Descent fuel burn that is pre-stored for your aircraft in the Aircraft database. Example:

/DSCB 0.900/ = Descent Bias percentage

/DSCFUELB nnnn/ This input is used to override the bias fixed fuel for Descent fuel burn that is pre-stored for your aircraft in the Aircraft database. This value is always in pounds or kilograms (never in hundreds). Example:

/DSCFUELB 90/ = 90 kilograms of Descent Bias fuel

/DSCTIMEB nn/ This input is used to override the bias time for Descent fuel burn that is pre-stored for your aircraft in the Aircraft database. Example:

/DSCTIMEB 10/ = Descent Bias time

/HLDB n.nnn/ This input is used to override the bias for Hold fuel burn that is pre-stored for your aircraft in the Aircraft database. Example:

/HLDB 1.250/ = Hold Bias percentage

/HLDFUELB nnnn/ This input is used to override the bias fixed fuel for Hold fuel burn that is pre-stored for your aircraft in the Aircraft database. This value is always in pounds or kilograms (never in hundreds). Example:

/HLDFUELB 75/ = 75 pounds of Hold Bias fuel

/HLDTIMEB nn/ This input is used to override the bias time for Hold fuel burn that is pre-stored for your aircraft in the Aircraft database. Example:

/HLDTIMEB 10/ = Hold Bias time

Weather Information

Along with the requested Flight Plan, you can have CyberTrac One Flight Operations Management System attach a Weather Briefing. This weather briefing can be one of the available standard weather briefings or a Customer defined weather briefing (referred to as a Weather Briefing Macro) to a maximum of 6 briefings.

Standard Weather Briefings cover:

- Originating Airport
- Take-off Alternate Airport (if specified)
- Destination Airport
- Destination Alternate Airport(s)
- En-route Airport(s) (if specified)
- Reclear Destination/Alternate Airports (if specified)

The following standard Weather Briefings are currently available:

g) Actual/Forecast weather for all stations

h) Actual/Forecast weather for all stations
NOTAMs for Orig/Dest/Altn/Enroute/Reclear Dest-Altn

i) Actual/Forecast/Wind-Temp weather for all stations

j) Actual/Forecast/Wind-Temp weather for all stations
NOTAMs for Orig/Dest/Altn/Enroute/Reclear Dest-Altn

k) Actual/Forecast weather for all stations
NOTAMs for Dest/Altn/Enroute/Reclear Dest-Altn

l) Actual/Forecast weather for all stations
NOTAMs for Orig/Altn/Enroute/Reclear Dest-Altn

m) Actual/Short-TAFS/Forecast weather for all stations

n) Actual/Short-TAFS/Forecast weather for all stations
NOTAMs for Orig/Dest/Altn/Enroute/Reclear Dest-Altn

A weather briefing can also be a customized customer briefing. Contact Skyplan to have your custom weather briefing created and saved.

The following describe the keywords associated with requesting Weather Information:

/WXBR xxxxxx/ Input used to request a Weather Briefing as part of the Flight Plan. Example:

/WXBR BRIEF1/ = Use customer WX Briefing
/WXBR 2/ = Use standard WX Briefing 2
/WXBR 1 BRIEF2/ = Produce both standard and customer WX Briefing

/ENRTWX xxxx/ Allows the user to request 1-12 En-route Airports (in IATA or ICAO format) weather as part of the flight plan. Any Airport(s) specified with the **ENRT** keyword will be combined with the **ENRTWX** keyword in the "ENROUTE" section of the weather briefing. This keyword should be used along with the **WXBR** keyword. Example:

/ENRTWX YYC/ = Request Enroute WX for Calgary

/ENRTWX YYC YWG YYZ/ = Request Enroute WX for Calgary, Winnipeg, and Toronto.

Note: Use the **WXBR** keyword carefully as it may produce a lot of weather information. Once you have successfully received your requested weather briefing along with your Flight Plan, if you must rerun the Flight Plan (because of a change in Payload as an example), please remove the **WXBR** keyword from your subsequent request as it will return the same Weather Briefing.

Equal Time Points

Equal Time Points can be requested in the Flight Plan that takes into consideration either the fuel requirements for a "Loss of Engine/Driftdown" scenario, or for a "Decompression/Emergency Descent to 10,000ft" scenario. The following are the keywords to be used to request an ETP calculation:

/ETP x/ To indicate whether ETP is to be calculated. Example:

/ETP Y/ = Calculate Equal Time Points (using Airline Dft ETP Policy)
/ETP 4/ = Calculate Equal Time Points using ETP Policy #4

/ENRT xxxx/ Allows the user to request 1-3 ETP Airport Pairs (in IATA or ICAO format). This keyword should be used along with the ETP keyword. Example:

/ENRT YYC YWG/ = Request ETP for Calgary, Winnipeg

NOTE: The following keywords are only available with **/ETP 10/** (Oxygen Depressurization ETP Policy) and **/ETOP 10/** (Oxygen Depressurization 3-ETP Type)

/ETPCRZ xxx/ This input is used to specify the Cruise Speed to be used for the Oxygen Depressurization ETP calculation. Example:

/ETPCRZ HSC/ = High Speed Cruise
/ETPCRZ 80/ = Mach .80

/ETPFL1 nnn/ This input is used to specify the Initial Level-Off Altitude to use for the Oxygen Depressurization ETP calculation. Example:

/ETPFL1 250/ = Initial Oxygen Depress at 25,000 Feet.

/ETPFL2 nnn/ This input is used to specify the Final Level-Off Altitude to use for the Oxygen Depressurization ETP calculation once the Oxygen Duration has been reached. Example:

/ETPFL2 110/ = Initial Oxygen Depress at 11,000 Feet.

/ETPOXYTM nnn/ This input is used to specify the Oxygen Duration (in minutes) to use for the Oxygen Depressurization ETP. Example:

/ETPOXYTM 45/ = 45 minutes of Oxygen.

The following are the available ETP Scenario Types that can be requested:

Note: If no reference is made to **Driftdown**, descent will be assumed to be **Instant**.

a) ETP Type 1 /ETP 1/

- Half (1/2) Engines out Driftdown to Stable Altitude / LRC
- 15 minutes Hold

b) ETP Type 2 /ETP 2/

- One (1) Engine out Driftdown to Stable Altitude / LRC
  or
- Depress - All Engines at 10,000ft / LRC
- 15 minutes Hold

c) ETP Type 3 /ETP 3/

- Two (2) Engines out Driftdown to Stable Altitude / LRC
  or
- One (1) Engine out at Optimum Altitude / LRC
- 15 minutes Hold

d) ETP Type 4 /ETP 4/

- Two (2) Engines out Driftdown to Stable Altitude / LRC
  or
- One (1) Engine out at Optimum Altitude / LRC
  or
- Depress - All Engines / LRC
- Driftdown: 30 minutes Hold.
- Instant: 15 minutes Hold; Burns are padded with 16% to account for Wind/Temp/Ice factor, and 5% for aircraft degradation. 1,000 Kgs (2,200 Lbs) are added for 2-missed approaches.

e) ETP Type 5 /ETP 5/

- Depress - All Engines / LRC
- 30 minutes Hold.

f) ETP Type 6 /ETP 6/

- Depress - All Engines / LRC
- 60 minutes Hold.

g) ETP Type 7 /ETP 7/

- Two (2) Engines out Driftdown to Stable Altitude / LRC
  or
- ETP Position only
- 15 minutes Hold

h) ETP Type 8 /ETP 8/

- Two (2) Engines out Driftdown to Stable Altitude / LRC
  or
- Two (2) Engines out at Optimum Altitude / LRC
- 15 minutes Hold.

i) ETP Type 9 /ETP 9/

- One (1) Engine out Driftdown to Stable Altitude / LRC
  or
- One (1) Engine out at Optimum Altitude / LRC
- 15 minutes Hold.

j) ETP Type 10 /ETP 10/ (Oxygen Depressurization)

- All Engines
- Instant descent (to each Altitude)
- User specified Cruise Mode (Dft: LRC)
- User specified Initial Level-Off Altitude (Dft: FL230)
- User specified Oxygen Duration (Dft: 30 minutes)
- User specified Final Level-Off Altitude (Dft: FL100)
- 30 minutes Hold.

k) ETP Type 11 /ETP 11/

- One (1) Engine out Driftdown to Stable Altitude / LRC
  or
- Depress - All Engines at 10,000ft / LRC
- 15 minutes Hold
- Burns are padded with 5% to account for Wind/Temp, 10% for Ice factor, 5% for aircraft degradation, and APU fuel.

Example:

Input Flight Plan Request:

```
FPREQ
FLTNO 7173/ORIG BOS/DEST EGKK/ALTN1 LHR/ETD 2330/
ACFT D003/PYLD 250/ETP Y/ENRT CYQX SNN/
EOR/
```

Computed Flight Plan (partial):

```
FOR ADDITIONAL FLIGHT PLANS-INFORMATION OR QUESTIONS-CONTACT SKYPLAN
AT YYCSKXH  -  YQLSKXH  OR  CALL CANADA 403-275-2511

ACFT XXXX       TYPE A310-300A    CRZ M79   FLT NO XXS7173  FMT 00

COMPUTED FOR KBOS/EGKK  FOR ETD 23.30Z
...
...
...
ETP FOR CYQX/EINN  LOC N50 25.2 W035 49.8  DIST 1533NM  TIME 02:51
KBOS/ETP BURNOFF 14230 MAGW 160000  DUMP 0
BURN FM ETP 11986 TIME 02:13 TOTAL FUEL 26216  LVL OFF 10000
TO CYQX N48 56.4 W054 34.2 731NM  TDV M05  WCP M86
TO EINN N52 42.1 W008 55.3 1007NM  TDV M04  WCP P63
...
...
...
```

ATC Filing

The following are the keywords that will instruct the Flight planning System to file your Flight Plan with the appropriate ATC centers.

/ATCFIL x/ This keyword instructs the system to file the FINALIZED Flight Plan with the appropriate ATC FIRs. A copy of the ATC flight plan is sent to the originating address as confirmation the Plan has been filed. Example:

/ATCFIL Y/ = File the ATC Flight Plan
/ATCFIL R/ = Refile previously filed ATC Flight Plan

/ATCFILTM nnnn/ Use this keyword to specify when to send the ATC Flight Plan to the appropriate ATC FIRs. Example:

/ATCFILTM 2030/ = File (send) the ATC FP at 2030Z

/ATCADR xxxxx/ Use this keyword to specify up to 7 additional addresses for sending the ATC Flight Plan to. Example:

/ATCADR LAXOOXX BOSOOXX/ = Send ATC FP to additional locations

Notes:

a) You must already have run the Flight Plan before requesting the system to File it with ATC (i.e.: 2 separate Requests).

b) If you do NOT File the Flight Plan using the **RECALL** keyword, you MUST use the **FLTDY** and **APF** (if different from the ALC keyword) keywords, otherwise the system may not find the Flight Plan.

c) Use the **IFREGN** keyword (when generating the Flightplan) to instruct the system to ATC File by either Airline Code/Flight Number (ALC+FLTNO) or by Aircraft Registration (Item 7). The system uses Airline Code/Flight Number as a default unless overridden in the Aircraft database to always file by Aircraft Registration.

The following keywords can be used to add additional filing information into the ATC Flight Plan sent to all ATC centers. These keywords must be used when requesting the actual Flight Plan, NOT when filing the plan with the ATCFIL keyword.

/IFRULE x/ Use this keyword to specify the flight rule for Air Traffic Control purposes (Item 8). The system default is "I" (IFR).

/IFTYP x/ Use this keyword to override the type of flight for Air Traffic Control purposes (Item 8). The system default is "S" (Scheduled).

/ATCWT x/ Use this keyword to override the ICAO Wake Turbulence Category for Air Traffic Control purposes (Item 9). The default is as specified in the Aircraft Database.

/ATCEQ1 x/ Use this keyword to override the COM/NAV Equipment flag (N,S) for Air Traffic Control purposes (Item 10a). The default is as specified in the Aircraft Database.

/ATCEQ2 xxxx/ Use this keyword to override the COM/NAV/Approach Aid Equipment available and serviceable on the aircraft for Air Traffic Control purposes (Item 10a). The default is as specified in the Aircraft Database.

/ATCEQ3 xx/ Use this keyword to override the Surveillance (SSR) Equipment (Transponder Code) available and serviceable on the aircraft for Air Traffic Control purposes (Item 10b). The default is as specified in the Aircraft Database.

/ATCALTN xxxx/ Use this keyword to add the Name of the alternate aerodrome(s) to the ATC Flight Plan (Item 18).

/ATCCOM xxxx/ Use this keyword to add additional data related to communication equipment as required by the appropriate ATS authority to the ATC Flight Plan (Item 18). The default is as specified in the Aircraft Database.

/ATCDAT xxxx/ Use this keyword to add additional Data link Capability in the ATC Flight Plan (Item 18). The default is as specified in the Aircraft Database.

/ATCDEP xxxx/ Use this keyword to add the Name of the departure aerodrome to the ATC Flight Plan (Item 18).

/ATCDEST xxxx/ Use this keyword to add the Name of the destination aerodrome to the ATC Flight Plan (Item 18).

/ATCDLE xxxx/ Use this keyword to add Enroute delay information to the ATC Flight Plan (Item 18).

/ATCDOF xxxx/ Use this keyword to add Flight Of Day information to the ATC Flight Plan (Item 18).

/ATCNAV xxxx/ Use this keyword to add additional data related to navigation equipment as required by the appropriate ATS authority to the ATC Flight Plan (Item 18). The default is as specified in the Aircraft Database.

/ATCOPR xxxx/ Use this keyword to add the Name of the operator to the ATC Flight Plan (Item 18).

/ATCORGN xxxx/ Use this keyword to add originator contact information to the ATC Flight Plan (Item 18).

/ATCPBN xxxx/ Use this keyword to override the Performance Based Navigation codes in the ATC Flight Plan (Item 18). The default is as specified in the Aircraft Database.

/ATCPER x/ Use this keyword to add the Aircraft Performance Data as required by the appropriate ATS authority to the ATC Flight Plan (Item 18). The default is as specified in the Aircraft Types Database.

/ATCRALT xxxx/ Use this keyword to add the Name of the enroute alternate aerodrome(s) to the ATC Flight Plan (Item 18).

/ ATCREG xxxx / Use this keyword to override the registration markings of the aircraft in the ATC Flight Plan (Item 18). The default is as specified in the Aircraft Database.

/ATCRFP Qn/ Use this keyword to specify the Replacement Flight Plan (Item 18). If used, enter a "Q" followed by a digit (1-9).

/ATCRMK xxxx/ Use this keyword to add remarks to the ATC Flight Plan (Item 18). The default is as specified in the Aircraft Database.

/ATCRVR nnn/ Use this keyword to specify the Runway Visual Range (Item 18). Specify the minimum RVR requirement for the flight. It may be used for air traffic flow management (ATFM) purposes.

/ATCSEL xxxx/ Use this keyword to add the SELCAL Code, if so prescribed by the appropriate ATS authority to the ATC Flight Plan (Item 18). The default is as specified in the Aircraft Database.

/ATCSTS xxxx/ Use this keyword to add reason(s) for special handling by ATS to the ATC Flight Plan (Item 18).

/ATCSUR xxxx/ Use this keyword to add additional data related to surveillance equipment as required by the appropriate ATS authority to the ATC Flight Plan (Item 18). The default is as specified in the Aircraft Database.

/ATCTALT xxxx/ Use this keyword to add the Name of the takeoff alternate aerodrome to the ATC Flight Plan (Item 18).

/ATCTYP xxxx/ Use this keyword to add the number and type(s) of aircraft to the ATC Flight Plan (Item 18).

/ATCI19/ Use this keyword to instruct the FPE to include the system generated Item 19 fields to the ATC Flight Plan.

/ATCI19A xxxx/ Use this keyword to add the colour of the aircraft and significant markings to the ATC Flight Plan (Item 19).

/ATCI19D1 nn/ Use this keyword to add the number of available Dinghies carried on the aircraft to the ATC Flight Plan (Item 19).

/ATCI19D2 nnn/ Use this keyword to add the total capacity, in persons, of all dinghies carried on the aircraft to the ATC Flight Plan (Item 19).

/ATCI19D3 C/ Use this keyword to add the “C” indicator if the dinghies carried on the aircraft are covered to the ATC Flight Plan (Item 19).

/ATCI19D4 xxxx/ Use this keyword to add the color of the dinghies carried on the aircraft to the ATC Flight Plan (Item 19).

/ATCI19J xxxx/ Use this keyword to add the type of Life Jackets on the aircraft to the ATC Flight Plan (Item 19).

/ATCI19N xxxx/ Use this keyword to add any other survival equipment carried and any other remarks regarding survival equipment to the ATC Flight Plan (Item 19).

/ATCI19P xxxx/ Use this keyword to add the total number of persons (passengers and crew) on board, when required by the appropriate ATS authority to the ATC Flight Plan (Item 19).

/ATCI19R xxxx/ Use this keyword to add the type of Emergency Radio(s) on the Aircraft to the ATC Flight Plan (Item 19).

/ATCI19S xxxx/ Use this keyword to add the type of Survival Equipment on the Aircraft to the ATC Flight Plan (Item 19).

Example:

Input Filing Request (explicit):

```
FPREQ
FLTNO 7173/FLTDY 05/ORIG KEWR/APF XXS/ATCFIL Y/ATCADDR LAXOOXX/
EOR/
```

Input Filing Request (using RECALL):

```
FPREQ
RECALL 000123/ATCFIL Y/ATCADDR LAXOOXX/
EOR/
```

ATC Filing Confirmation Message:

```
CTO FLIGHT PLANNING SYSTEM - ATC FILING

FLIGHT FILED WITH THE FOLLOWING CENTERS:
KEWRZQZX KZDCZQZX KZNYZQZX KZMAZQZX MDCSZQZX TNCFZQZX TNCAZQZX

ATC FLIGHT PLAN:
(FPL-XXS7173-IS
-MD80/M-SH/C
-KEWR1430
-N0439F310 EWR4 WHITE J209 VILLS/N0440F310 J209 ORF DCT ECG A554
 TAANA/N0442F350 A554 CDO A567 DUSAN DCT
-TNCA0409 TNCC
-EET/KZDC0009 KZNY0102 KZMA0219 MDCS0258 TNCF0336
 REG/XXXX SEL/BJFQ PER/M075)

RECALL NO: 000154
```

Reclear/Refile Operation

Prior to attempting any Reclear or Refile flight planning, there should be an understanding of the concept behind this method of plan calculation.

Reclear or Refile Flight Planning is designed to legally reduce the amount of ENROUTE fuel reserves required for flight.

Re-clearing might be used:

- to reduce trip fuel burn through the reduction of the weight of the fuel carried,
- to provide for more payload capability,
- and/or increase the operational range of the aircraft.

The basic concept of a Reclear/Refile flight plan is to change a partial amount of your En-route Reserves into burnable destination fuel. This is done is by selecting a waypoint on the planned flight route (normally approximately 50 to 75 percent away from the origin), where the decision will be made by the crew to continue to their Destination or divert. This point is called the Re-clearance Point (Keyword **RCPNT**).

At the Reclear Point, the crew will decide to either continue to their intended Destination, or divert to their Re-clearance Destination (Keyword **RCDEST**). If they choose to divert to the Reclear Destination, they will have to select an Alternate that will be called the Re-clearance Alternate (Keyword **RCALTN**).

The Flight Planning system will calculate the En-route Reserve from the Origin to the Reclear Point, and from the Reclear Point to the Reclear Destination. It will also calculate a separate En-route Reserve from the Reclear Point to the intended Destination. Once the aircraft arrives at the Reclear Point, the Reserve figures from the Origin to the Reclear Point and from the Reclear Point to the Reclear Destination can be considered as Useable Fuel.

If the fuel amount that is in the tanks at the Reclear Point is above the Minimum Fuel required to operate from the Reclear Point to the intended Destination, the crew can continue to the intended Destination. If the fuel amount that is in the tanks at the Reclear Point is below the Minimum Fuel required to operate from the Reclear Point to the intended Destination, the crew will decide to divert to the Reclear Destination.

Note that at the Re-clearance Point, the crew will advise ATC of their actions and proceed to either the intended Destination or to the Re-clearance Destination.

Using this method of flight planning legally reduces the requirement to carry en-route fuel reserves based on TOTAL trip length and allows reduced plan en-route fuel reserves to be calculated based on a PARTIAL trip length. Keep in mind that these en-route fuel reserves MUST meet the minimum requirements to operate BOTH portions of the flight.

It should be strongly stressed that using the Reclear method of flight planning should only be done after careful consideration of potential Weather and ATC

problems, both en-route and at the final destination, to insure that the flight can operate safely.

Note: In order to determine the en-route waypoint or Reclear Point, an initial flight plan should be run to select the route of flight. The actual input to be used will usually be found listed in the detail route section of your Flight plan.

The following describe the keywords associated with Reclear/Refile operation:

/RCPNT xxxx/ This keyword is used to specify the en-route waypoint from which a re-clearance is to be computed. The specific waypoint used MUST be on the actual route of flight.

/RCDEST xxxx/ This keyword specifies the Reclear or en-route diversion airport (in IATA or ICAO format). Usually selected anywhere between 50% to 75% distance of the route of flight. Used to compute reduced en-route fuel reserve requirements.

/RCALTN xxxx/ This keyword specifies the Reclear Alternate airport (in IATA or ICAO format).

Example:

Input Flight Plan Request:

```
FPREQ
FLTNO 7174/ORIG LGW/DEST BGR/ALTN1 BOS/ETD 2300/
ACFT D003/PYLD 250/RCPNT LOACH/RCDEST YQX/RCALTN YYR/
EOR/
```

Computed Flight Plan (partial):

```
...
...
RECLEAR EGKK/CYQX IFR ALTN/CYYR 0542
BURN   ENRT   ALTN  S/O   ADD   MIN BRF XTRA   TTL BRF TAXI  RAMP
25551  2341   4463  1960  483   34798   0      34798   208   35006

RECLEAR AUTHORIZED OVHD LOACH      TO KBGR   ALTN KBOS    0153
BURN   ENRT   ALTN  S/O   ADD   MIN     XTRA   REQD
6862   739    2650  1960  0     12211   0      12211
...
...
```

TEST Flight Plan Request

CTO Flight Planning System provides the ability to request a TEST plan which produces a short Flight Plan. This feature allows the User to specify a specific Wind Component and Temperature Deviation for checking out the feasibility of a particular leg for marketing / payload planning purposes.

A standard short Flight Plan format is available and can be requested by selecting format 0 (/**FMT 00**/). If this format is not adequate for your needs, a custom short Flight Plan can be created for you.

The following describe the keywords associated with requesting a TEST Flight Plan:

/FLTNO TEST/ Instructs the system to produce a TEST Flight Plan

/FMT 00/ Select the short Flight Plan Format. If you have a custom short Flight plan format, this keyword will not be required (unless instructed otherwise).

/COMP nn/ Input the required Wind Component to be used in calculating the Flight Plan. Current Wind Component information will be used if this keyword is not specified. Example:

/COMP -5/ = a 5kt Headwind
/COMP 15/ = a 15kt Tailwind

/ISA nn/ Input the required ISA Temperature Deviation to be used in calculating the Flight Plan. Current ISA Temperature Deviation information will be used if this keyword is not specified. Example:

/ISA -3/ = 3 degrees colder than std dev
/ISA 5/ = 5 degrees warmer than std dev

Note: Both /**COMP**/ and /**ISA**/ keywords must be used together if you override the Wind/Temperature information for the TEST Flight Plan.

/WNDSRC xxx/ Input the desired Wind Model to be used in calculating the Flight Plan. Current Wind Component information will be used if this keyword is not specified. Example:

/WNDSRC AVN/ = use the AVN Wind Model
/ WNDSRC M03/ = use the March Average Wind Model

Example:

Input TEST Flight Plan Request:

```
FPREQ
FLTNO TEST/ORIG KJFK/DEST YYZ/ALTN1 YOW/ETD 2100/FMT 00/
ACFT D020/PYLD 250/COMP -5/ISA 3/
EOR/
```

Computed TEST Flight Plan:

```
FOR ADDITIONAL FLIGHT PLANS-INFORMATION OR QUESTIONS-CONTACT SKYPLAN
AT YYCSKXH  -  YQLSKXH  OR  CALL CANADA 403-275-2511

TEST VERSION Z

ACFT XXXX       TYPE B737-2X6C    CRZ M74   FLT NO XXSTEST  FMT 00

COMPUTED FOR KJFK/CYYZ  FOR ETD 21.00Z
          FUEL  TIME  DIST  ARRIVE  TAKEOFF  LAND  AV PLD OPNLWT
POA CYYZ 005807 00.58 0328  22.20Z   100007 094200 025000 062500
ALT CYOW 004042 00.38 0214   SECONDARY ALT-NIL    FOD 006700
HLD      002000 00.30
RES      000507 00.06
ADD      000000 00.00
REQD     012356 02.12
XTR      000151 00.02
TOT      012507 02.14  UNITS LBS  DXR SITA INTERFACE

WIND M005  MXSH 00  RTE MAN

KJFK JFK6 GAYEL J95 BUF V36 CYYZ
KJFK/0350/

RECALL 000123
```

Secondary Flight Plan Request

Some airlines may have a requirement to request that additional Flight Plan calculations be performed to account for operating the Flight under multiple scenarios (i.e.: Normal Flight Plan plus Flight Plan at 15,000 Feet - Depressurization).

The following describe the required keywords needed when requesting one or more Secondary Plans:

/EOP/ This keyword is used to identify the end of the Primary Flight Plan Request within a multiple Flight Plan Request. It must be the last entry on the Request line.

/EOS/ This keyword is used to identify the end of the Secondary Flight Plan Request within a multiple Flight Plan Request. It must be the last entry on the Request line.

When requesting secondary Flight Plans, all keyword information for the Primary Flight Plans must precede the Secondary Flight Plan(s) keyword information. NOTE: All keyword information is duplicated for each subsequent secondary Flight plan request information. To force a keyword to revert to its system default value, just specify the keyword with no data information (i.e.: /**FL**/).

Example:

Flight Plan Request with Secondaries:

```
FPREQ
FLTNO 1234/ORIG CYYC/DEST CYYZ/TALTN CYEG/ETD 2100/
ACFT D003/ALTN1 CYUL/ALTN2 CYMX/PYLD MAX/ADF 50/
RTE 02/CRZ 80/FL 290/EOP/
RTE 02/CRZ LRC/EOS/
RTE 01/FL/EOR/
```

Produces a Primary Flight Plan for CYYC-CYYZ with CYEG as the takeoff alternate, CYUL/CYMX as the destination alternates, will use the second best route (/**RTE 02**/), capping the flight level at 290, using M80 cruise mode. The requested payload is MAXP with 5000 (Lbs./Kgs) additional fuel. Two (2) Secondary Flight Plans will be computed along with the Final Plan.

It is important to note that all the keyword Information provided in the Primary Flight Plan (.../**EOP**/) is used as the base input for all subsequent Secondary Flight Plan requests (i.e.: .../**EOS**/ etc.)

Computed Flight Plan with Secondaries

```
FOR ADDITIONAL FLIGHT PLANS-INFORMATION OR QUESTIONS-CONTACT SKYPLAN
AT YYCSKXH  -  YQLSKXH  OR  CALL CANADA 403-275-2511

ACFT XXXXX      TYPE B757-200     CRZ M80   FLT NO XXS1234  FMT 00

COMPUTED FOR CYYC/CYYZ  FOR ETD 21.00Z
          FUEL  TIME  DIST  ARRIVE  TAKEOFF  LAND  AV PLD OPNLWT
POA CYYZ 028460 03.25 1477  00.32Z   226460 198000 051948 130000
...
...
...
------------------------- SECONDARY PLAN A --------------------------
            FUEL  TIME  DIST
POA  CYYZ  27868  3.32  1477  FOD   15912
ALT  CYUL   5765  0.47   298  ALT-2 CYMX           WEIGHT INFORMATION
HOLD        2500  0.30                            RAMP        226201
RESV        2647  0.21                            TAKE-OFF    225868
ADDL        5000  0.40                            LANDING     198000
REQD       43780  5.50                            EMPTY OPER  130000
EXTRA          0  0.00                            PAYLOAD      52088
TOTAL      43780  5.50  UNITS LBS                 ZERO FUEL   182088

CRZ LRC  WIND M002  MXSH 01  RTE 002

CYYC DCT YEA T469 YHD T468 DANNY DCT CYYZ
CYYC/0290/

------------------------- SECONDARY PLAN B --------------------------
            FUEL  TIME  DIST
POA  CYYZ  25919  3.23  1477  FOD   15704
ALT  CYUL   5772  0.47   298  ALT-2 CYMX           WEIGHT INFORMATION
HOLD        2500  0.30                            RAMP        224252
RESV        2432  0.20                            TAKE-OFF    223919
ADDL        5000  0.42                            LANDING     198000
REQD       41623  5.42                            EMPTY OPER  130000
EXTRA          0  0.00                            PAYLOAD      52296
TOTAL      41623  5.42  UNITS LBS                 ZERO FUEL   182296

CRZ LRC  WIND P011  MXSH 02  RTE 001

CYYC V306 ALOMO J512 YXE J515 VLR J500 SSM J531 YMS V164 CYYZ
CYYC/0330/VBI/0370/

RECALL 000123
```

Automatic Secondary Flight Plan Request

The Flight Planning system has a feature that allows you to automatically request that additional Flight Plan calculations be performed when requesting a single Flight Plan (i.e.: Normal Flight Plan plus Flight Plan at next lowest Flight Level).

The following describe the required keyword needed when requesting an automatic Secondary Flight Plan:

/AUTOSEC x/ This keyword is used to indicate whether to calculate an Automatic Secondary Flight Plan:

/AUTOSEC Y/ = Calculate Auto Secondary Plan (same as AUTOSEC 1)
/AUTOSEC 3/ = Calculate Auto Secondary Plan
/AUTOSEC N/ = Disable Auto Secondary Feature

When requesting an Automatic Secondary Flight Plan, all keyword information for the Primary Flight Plans will be used when computing the Secondary Flight Plan. The Automatic Secondary Plans, when requested, will be:

AUTOSEC 1:

- Secondary 1 - Next Lowest Flight Level (from Primary Plan)
- Secondary 2 - Initial Flight Level (from Primary Plan)

AUTOSEC 2:

- Secondary 1 - Long Range Cruise (/CRZ LRC/)
- Secondary 2 - Next Lowest Flight Level with requested Cruise Mode (from Primary Plan)

AUTOSEC 3:

- Secondary 1 - Next Lowest Flight Level (from Primary Plan)
- Secondary 2 - Next Lowest Flight Level (from Secondary 1 Plan)

Note: If the Secondary flight plan cannot run with specified the CRZ mode, the system will try with /**CRZ LRC**/.

AUTOSEC 4: For use in Standard Airspace

- Secondary 1 - Next Highest Flight Level (from Primary Plan)
- Secondary 2 - Next Lowest Flight Level (from Primary Plan)

Note: Use /**FL nnn**/ keyword to cap the Primary Plan flight level. Otherwise, Secondary 1 will report the same values as the Primary Plan.

AUTOSEC 5: For use in NAT RVSM Airspace while on Oceanic Track Structures

- Secondary 1 - Next Highest Flight Level (from Primary Plan)
- Secondary 2 - Next Lowest Flight Level (from Primary Plan)

Note: Use /**FL nnn**/ keyword to cap the Primary Plan flight level. Otherwise, Secondary 1 will report the same values as the Primary Plan.

AUTOSEC 6: For use in RVSM Airspace (excluding NAT RVSM)

- Secondary 1 - Next Highest Flight Level (from Primary Plan)
- Secondary 2 - Next Lowest Flight Level (from Primary Plan)

Note: Use /**FL nnn**/ keyword to cap the Primary Plan flight level. Otherwise, Secondary 1 will report the same values as the Primary Plan.

AUTOSEC 7:

- Secondary 1 - Next Highest Flight Level (from Primary Plan)
- Secondary 2 - Next Lowest Flight Level (from Primary Plan)
- Secondary 3 - Next Lowest Flight Level (from Secondary 2 Plan)

Note: If the Secondary flight plan cannot run with specified the CRZ mode, the system will try with /**CRZ LRC**/.

Also, if you use the /**AUTOSEC**/ keyword in a normal Secondary Flight Plan Request (i.e.: a request with the /**EOP**/ or /**EOS**/ keywords), the Automatic Secondary feature will be disabled.

Example:

Flight Plan Request with Automatic Secondaries:

```
FPREQ
FLTNO 1234/ORIG CYYC/DEST CYYZ/TALTN CYEG/ETD 2100/
ACFT D003/ALTN1 CYUL/ALTN2 CYMX/PYLD MAX/ADF 50/
RTE 02/CRZ 80/AUTOSEC Y/EOR/
```

Produces a Primary Flight Plan for CYYC-CYYZ with CYEG as the takeoff alternate, CYUL/CYMX as the destination alternates, will use the second best route (/**RTE 02**/), using M80 cruise mode. The requested payload is MAXP with 5000 (Lbs./Kgs) additional fuel. Two (2) Secondary Flight Plans will be computed along with the Final Plan:

- Secondary Plan 1: Flight Plan using next lowest Flight Level
- Secondary Plan 2: Flight Plan using initial Flight Level

Flight Plan Macros

CTO Flight Planning System provides a facility where you can pre-store one or more keyword input combinations for later recall when requesting a Flight Plan. The term that is used to describe these pre-stored keywords is "Flight Plan Request Macro". Each macro can contain one keyword or a complete Flight Plan request.

The system also provides the facility to pre-store one or more Airline specific keywords that the system will use whenever a Flight Plan is generated. To enable this feature, you must create a macro called MASTER or MASTER.apf (using the **MACRA** keyword) which will contain your Airline specific keywords. If you wish to disable the MASTER macro keywords, include the /**NOMSTR**/ keyword within your request.

Notes:

a) Any keywords found in a Customer Macro or in the Flight Plan request itself will override the corresponding keywords found in the MASTER Customer Macro (i.e.: the last occurrence of the keyword is the one the system will use).

b) To use a Customer Macro and/or MASTER Macro tied to a specific Airline Parameter File, include the /**APF**/ keyword before you specify the Customer Macro.

Example:

```
FPREQ
FLTNO 1234/ORIG CYYC/DEST CYYZ/ALTN1 CYUL/ALTN2 CYMX/
APF XYZ/MACRO01/
EOR/
```

The following describe the keywords needed to manipulate your own Flight Plan Request Macros:

/MACRA xxxxx/ This keyword is used to create a Flight Plan Request macro.

/MACRC xxxxx/ This keyword is used to replace a Flight Plan Request macro.

/MACRD xxxxx/ This keyword is used to delete a Flight Plan Request macro.

/MACRL xxxxx/ This keyword is used to get information about all your Flight Plan Request macros. Using this keyword with a macro name will return the content of the macro. Using this keyword with no input will return a list of all your macros.

Note: To manipulate Macros tied to a specific Airline Parameter File, include the 3-letter code. (i.e.: /**MACRA MACRO01.XYZ**/).

Examples:

Adding a Macro

```
FPREQ
MACRA FLT1234/
FLTNO 1234/ORIG CYYC/DEST CYYZ/
TALTN CYEG/ALTN1 CYUL/ALTN2 CYMX/
FL 290/CRZ LRC/CONF 1/ADF 50/
EOR/
```

Creates a macro called FLT1234 for later use.

Changing a Macro

```
FPREQ
MACRC FLT1234/
FLTNO 1234/ORIG CYYC/DEST CYYZ/
TALTN CYEG/ALTN1 CYUL/ALTN2 CYMX/
EOR/
```

Changes/Replaces a macro called FLT1234 for later use.

Deleting a Macro

```
FPREQ
MACRD FLT1234/
EOR/
```

Deletes a macro called FLT1234.

Using a Macro in a Flight Plan Request

```
FPREQ
FLT1234/ETD 1230/ACFT AA1/PYLD 120/FL 310/EOR/
```

Produces a Flight Plan using a combination of keywords pre-stored in macro FLT1234 and those specified with the request. Any keywords used after the macro will override those defined in the macro (i.e.: FL is changed to 310 from 290).

ETOPS

The rules for ETOPS operations are extensive and the interpretation of the rules is somewhat variable by company and country of origin.

Therefore, prior to establishing an ETOPS program for your airline, Skyplan Operations must be provided with the following information. This information will be used to establish an ETOPS Database based on your method of operation.

a) Authorized ETOPS range limit rules:

- Time and/or mileage

b) Company ETOPS planning parameters:

- Engine out only
- Engine out and decompression
- Decompression only

c) Aircraft Performance for ETOPS Operations:

- Driftdown tables or Profile Descent
- Engine out performance
- Holding Schedules

d) Scheduled City Pairs where ETOPS may apply.

Using this information, Skyplan will develop a customized ETOPS program around your Company Operations Specifications.

The keywords described below are used to invoke the ETOPS Route Compliance feature that verifies if the selected route complies with the ETOPS rules for the specified aircraft:

/ETOPSTN xxxx/ This keyword is used to specify up to 13 airports along the selected route.

/ETOPTM nnn/ This optional keyword is used to override the aircraft's default ETOPS time (in minutes). The value cannot be greater than the ETOPS time defined for the aircraft in the Aircraft Database.

/ETOP n/ This optional keyword is used to instruct the system to include the requested 3-ETP Scenario calculation. You must provide en-route stations (/ENRT/).

The following are the available 3-ETP Scenario Types that can be requested:

Note: If no reference is made to **Driftdown**, descent will be assumed to be **Instant**.

a) 3-ETP Type 1 /ETOP 1/

- 1st Scenario: Depress - All Engines at 10,000ft / LRC
- 2nd Scenario:
  - One (1) Engine at 10,000ft / LRC
    or
  - Depress - All Engines at 10,000ft / LRC
- 3rd Scenario:
  - One (1) Engine out Driftdown to Stable Altitude / LRC
    or
  - One (1) Engine at Optimum Altitude / LRC
    or
  - All Engines at Optimum Altitude / LRC

Notes: 15 minutes Hold; Burns are padded with 16% to account for Wind/Temp/Ice factor, and 5% for aircraft degradation. If the Maximum Take-Off Weight (MTOW) exceeds 45,360 Kgs (100,000 Lbs), 1,000 Kgs (2,200 Lbs) are added for 2-missed approaches/Overshoot.

b) 3-ETP Type 2 /ETOP 2/

- 1st Scenario: Depress - All Engines at 10,000ft / LRC
- 2nd Scenario:
  - One (1) Engine out Driftdown to Stable Altitude / LRC
    or
  - One (1) Engine at Optimum Altitude / LRC
    or
  - All Engines at Optimum Altitude / LRC
- 3rd Scenario: All Engines at Current Altitude / Current Cruise Mode

Notes: 15 minutes Hold; Burns are padded with 16% to account for Wind/Temp/Ice factor, and 5% for aircraft degradation. If the Maximum Take-Off Weight (MTOW) exceeds 45,360 Kgs (100,000 Lbs), 1,000 Kgs (2,200 Lbs) are added for 2-missed approaches/Overshoot.

c) 3-ETP Type 3 /ETOP 3/

- 1st Scenario: Depress - All Engines at 10,000ft / LRC
- 2nd Scenario:
  - One (1) Engine out Driftdown to Stable Altitude / LRC
    or
  - One (1) Engine at Optimum Altitude / LRC
    or
  - All Engines at Optimum Altitude / LRC
- 3rd Scenario: All Engines at Current Altitude / Current Cruise Mode

Notes: 15 minutes Hold.

d) 3-ETP Type 4 /ETOP 4/

- 1st Scenario: Depress - All Engines at 15,000ft / LRC
- 2nd Scenario:
  - One (1) Engine out Driftdown to Stable Altitude / LRC
    or
  - One (1) Engine at Optimum Altitude / LRC
    or
  - All Engines at Optimum Altitude / LRC
- 3rd Scenario: All Engines at Current Altitude / Current Cruise Mode

Notes: 15 minutes Hold; Burns are padded with 16% to account for Wind/Temp/Ice factor, and 5% for aircraft degradation. If the Maximum Take-Off Weight (MTOW) exceeds 45,360 Kgs (100,000 Lbs), 1,000 Kgs (2,200 Lbs) are added for 2-missed approaches/Overshoot.

e) 3-ETP Type 5 /ETOP 5/

- 1st Scenario: Depress - All Engines at 15,000ft / LRC
- 2nd Scenario:
  - One (1) Engine out Driftdown to Stable Altitude / LRC
    or
  - One (1) Engine at Optimum Altitude / LRC
    or
  - All Engines at Optimum Altitude / LRC
- 3rd Scenario: All Engines at Current Altitude / Current Cruise Mode

Notes: 15 minutes Hold.

f) 3-ETP Type 6 /ETOP 6/

- 1st Scenario: Depress - All Engines at 10,000ft / LRC
- 2nd Scenario:
  - One (1) Engine out Driftdown to Stable Altitude / LRC
    or
  - One (1) Engine at Optimum Altitude / LRC
    or
  - All Engines at Optimum Altitude / LRC
- 3rd Scenario: All Engines at Current Altitude / Current Cruise Mode

Notes: 5 minutes Hold.

g) 3-ETP Type 7 /ETOP 7/

- 1st Scenario: Depress - All Engines at 15,000ft / LRC
- 2nd Scenario:
  - One (1) Engine out Driftdown to Stable Altitude / LRC
    or
  - One (1) Engine at Optimum Altitude / LRC
    or
  - All Engines at Optimum Altitude / LRC
- 3rd Scenario: All Engines at Current Altitude / Current Cruise Mode

Notes: 5 minutes Hold.

h) 3-ETP Type 8 /ETOP 8/

- 1st Scenario: Depress - All Engines at 25,000ft / LRC
- 2nd Scenario:
  - One (1) Engine out Driftdown to Stable Altitude / LRC
    or
  - One (1) Engine at Optimum Altitude / LRC
    or
  - All Engines at Optimum Altitude / LRC
- 3rd Scenario: All Engines at Current Altitude / Current Cruise Mode

Notes: 15 minutes Hold.

i) 3-ETP Type 9 /ETOP 9/

- 1st Scenario: Depress - All Engines at 10,000ft / LRC
- 2nd Scenario:
  - One (1) Engine at 10,000ft / LRC
    or
  - Depress - All Engines at 10,000ft / LRC
- 3rd Scenario:
  - One (1) Engine out Driftdown to Stable Altitude / LRC
    or
  - One (1) Engine at Optimum Altitude / LRC
    or
  - All Engines at Optimum Altitude / LRC

Notes: 15 minutes Hold; Burns are padded with 5% to account for Wind/Temp, 10% for Ice factor, 5% for aircraft degradation, and APU Fuel.

j) 3-ETP Type 10 /ETOP 10/

- 1st Scenario: Oxygen Depressurization
- 2nd Scenario:
  - One (1) Engine out Driftdown to Stable Altitude / LRC
    or
  - One (1) Engine at Optimum Altitude / LRC
    or
  - All Engines at Optimum Altitude / LRC
- 3rd Scenario: All Engines at Current Altitude / Current Cruise Mode

Notes: 15 minutes Hold. Use **ETPCRZ**, **ETPFL1**, **ETPFL2**, **ETPOXYTM** keywords to override the system defaults for the 1st ETP Scenario.

The following is an example of a Flight Plan request with 3-ETPs:

```
FPREQ
FLTNO 123/ORIG RKSS/DEST PHNL/ALTN1 ITO/ETD 0400/ACFT D003/
PYLD MAX/RTE R04/ETOP Y/ENRT RJAW PWAK PWAK PHNL/
EOR/
```

The following are the steps to follow when requesting a Flight Plan with ETOPS requirements (standard ETP scenario and ETOPS Route Compliance):

a) Request Route Analysis (Keyword /**RTEDTL**/).

b) Select that best or desired ETOPS Route which will be identified in the analysis and sorted by least fuel/time.

c) Run a standard flight plan and input the ETOPS airports using the ETP and/or ETOPS functions (Keywords **/RTE/**, **/ETP/**, **/ENRT/**, **/ETOPSTN/** and **/ETOPTM/**).

Example:

Step 1 - Request Route Analysis

```
FPREQ
FLTNO 123/ORIG RKSS/DEST PHNL/ALTN1 ITO/ETD 0400/ACFT D003/
PYLD MAX/RTEDTL S/
EOR/
```

Step 2 - Select best ETOPS Route from Route Analysis

```
  -------------------- ROUTE ANALYSIS ------------------
  FLT 123/23  RKSS-PHNL  ETD 230400   FIN AAS  MACH 0.78

  01 - RKSS-PHNL-02  P019  8+37  ROUTE 4064  G/C 3951

    + RKSS SEL KALMA BULL BIGOB PAROT KPO SAPRA JEC TNO TZV
      CUE40 RKX CUE XMC LHE SGR XAC CVC KAGIS SCORE COMFE
      RIPKI 37N115E 37N160E ETC

  02 - RKSS-PHNL-04  P014  8+51  ROUTE 4141  G/C 3951

    + RKSS SEL KALMA BUL BIGOB PAROT KPO SAPRA JEC TNO TZV
      CUE40 RKX CUE XMC SGV PQ MERESD ADAL BIPEP TONK
      28N155E 27N160E 26N170E 24N180E 23N170W SILVA SPK
      BOOKE SHIGI PHNL

    + ETOPS ROUTE   120 MIN RULE.

----------------------END OF REPORT--------------------

RECALL 000123
```

Step 3 - Request Flight Plan with ETOPS requirements:

```
FPREQ
FLTNO 123/ORIG RKSS/DEST PHNL/ALTN1 ITO/ETD 0400/ACFT D003/
PYLD MAX/RTE R04/ETP Y/ENRT RJAW PWAK PWAK PHNL/
/ETOPSTN RJAW PWAK PHNL/
EOR/
```

Flight Plan Recall Number

Each flight plan generated by the system has a RECALL number assigned to it that is displayed at the end of the flight plan or Route Analysis report (if **/RTEDTL S/** was used).

When a flight plan is requested using a RECALL number, the system will retrieve the keywords that were used to generate the previous flight plan, combine them with the current request, and generate a new flight plan. It important to note that the keywords used in the current request will override the same keywords which were specified in the original request along with any keywords stored in a customer macro or your airline specific MASTER macro.

The following describes the keyword to recall a prior requested flight plan:

/RECALL nnnnnn/ Specify recall number.

Example:

RECALL Flight Plan Request:

```
FPREQ
RECALL 123/ETD 2100/PYLD 250/
EOR/
```

Computed Flight Plan:

```
FOR ADDITIONAL FLIGHT PLANS-INFORMATION OR QUESTIONS-CONTACT SKYPLAN
AT YYCSKXH  -  YQLSKXH  OR  CALL CANADA 403-275-2511

ACFT XXXX       TYPE B737-2X6C    CRZ M74   FLT NO XXSTEST  FMT 00

COMPUTED FOR KJFK/CYYZ  FOR ETD 21.00Z
          FUEL  TIME  DIST  ARRIVE  TAKEOFF  LAND  AV PLD OPNLWT
POA CYYZ 005807 00.58 0328  22.20Z   100007 094200 025000 062500
ALT CYOW 004042 00.38 0214   SECONDARY ALT-NIL    FOD 006700
HLD      002000 00.30
RES      000507 00.06
ADD      000000 00.00
REQD     012356 02.12
XTR      000151 00.02
TOT      012507 02.14  UNITS LBS  DXR SITA INTERFACE

WIND M003  MXSH 00  RTE MAN

KJFK JFK6 GAYEL J95 BUF V36 CYYZ
KJFK/0350/

RECALL 000124
```

The main benefit of using the RECALL keyword is it will save you from having to re-specify all keywords to request additional flight plans. The following describes some specific uses of the RECALL keyword:

ATC Filing

Once you have requested a flight, using the RECALL keyword and the recall number from the flight plan, you can file the flight plan as follows:

```
FPREQ
RECALL 123/ATCFIL Y/ATCADR EGGKZTZX/EOR/
```

Secondary Flight Plans

When you request a flight plan with secondaries (using the /**EOP**/**EOS**/ keywords), the system will generate the flight plan with the appropriate number of secondary flight plans.

However, if you wished to regenerate the flight plan using a different payload, the system will not remember the keywords after the /**EOP**/**EOS**/ keywords. The system will not automatically generate the secondaries when using the recall number in your request. You will have to re-specify all secondary flight plan keywords. Example:

1st Request:

```
FPREQ
FLTNO 999/ORIG MIA/DEST JFK/ETD 0100/ACFT XXX/PYLD 50/
EOP/FL 280/EOS/FL 100/EOR/
```

This request will return a flight plan with 2 secondaries.

2nd Request:

```
FPREQ
RECALL 123/PYLD 60/EOR/
```

This request will only return the primary flight plan only. It will not contain the secondaries at FL280 and FL100.

3rd Request:

```
FPREQ
RECALL 123/PYLD 60/EOP/FL 280/EOS/FL 100/EOR/
```

This request will return a flight plan with 2 secondaries.

Note: The system handles the /**AUTOSEC**/ keyword differently. The system will automatically generate the secondary flight plans even though you do not specify the keyword in a subsequent request (as long as the keyword was specified in the original request).

Forwarding of Flight Plans

Specific keywords such as /**ADR**/, /**WXBR**/, /**RTEDTL**/, when specified in a recall request with no other keywords present, will instruct the system to retrieve the recalled flight plan and send it to the requesting address and any addresses specified in the ADR keyword (if present).

If the /**WXBR**/ keyword is specified, the system will send the latest weather. The /**RTEDTL**/ keyword, if specified, will send the latest Route Analysis for the recalled flight plan.

Example:

```
FPREQ
RECALL 123/WXBR 2/RTEDTL Y/ADR YVRXXAB/EOR/
```

The system will send the recalled flight plan, Standard Weather briefing 2, and the Route Analysis to YVRXXAB and the requesting address.

Miscellaneous Keywords

This section describes other optional keywords which are available for use when requesting a Flight Plan:

/ADR xxxxx/ This keyword allows you to send the Flight Plan to seven (7) additional addresses. Note: If the system encounters any errors, the error messages will only be sent to the originating address only. Example:

/ADR LAXOOXX BOSOOXX/ = Send Flight Plan to additional locations.

/AFIS x/ This keyword is used to request an AFIS Flight Plan for a FINALIZED Flight Plan. When this keyword is used, an AFIS plan will be generated and automatically sent to the selected AFIS provider (Global or Arinc). A confirmation message will be sent notifying you that the AFIS plan was sent. Example:

Notes:

a) You must already have run the Flight Plan before requesting the system to generate an AFIS plan (i.e.: 2 separate Requests).

b) If you do NOT request the AFIS Flight Plan using the **RECALL** keyword, you MUST use the **FLTDY** and **APF** (if different from the ALC keyword) keywords, otherwise the system may not find the Flight Plan.

/AFIS G/ = request an AFIS flight plan be sent to Global.

/ALC xxx/ This keyword is used to specify the 3 letter Airline Code. This code is prefixed to the flight number (FLTNO) to generate the complete Flight Number in the flight plan. Normally, this keyword will not be required. Example:

/ALC XYZ/ = sets the Airline Code to XYZ.

/APF xxx/ This keyword is used to specify what Airline Specific Parameters are to be used when computing the Flight Plan. Normally, this keyword will not be required as each Airline has only one set of Parameters that is the default. Use this keyword when you may have more than one set of operating parameters (i.e.: based on different aircraft types). Example:

/APF ABC/ = instructs the system to use the ABC Parameters.

/CAPT xxxx/ This keyword is used to identify the Captain for the Flight. The corresponding Captain's name will be printed on the flight plan. Example:

/ CAPT 1024/ = Captain code 1024.
/CAPT F SMITH/ = Captain name F SMITH.

/CARGO nnnn/ This keyword is used to specify the cargo weight. This keyword is used in conjunction with the PAX keyword. Example assuming weight settings in hundreds of kilograms:

/CARGO 250/ = 25,000 kilograms of cargo.

/DEVTYP xxx/ This keyword is used to identify the type of workstation used to request a flightplan. When used, it instructs the Flight Planning system to ensure the response is compatible with the receiving workstation. Only supported with E-Mail requests. Example:

/ DEVTYP PPC/ = Device is a Pocket PC.

/DXPR xxxx/ This keyword is used to identify the dispatcher who is requesting the Flight Plan. The corresponding Dispatcher's name will be printed on the flight plan. Example:

/DXPR 1027 = Dispatcher code 1027.
/DXPR FRED/ = Dispatcher name FRED.

/ETA nnnn/ This keyword is used to specify the Estimated Time of Arrival for the flight in Zulu. This keyword is normally not required. If the **ETD** keyword is not specified, then this keyword instructs the system to compute the ETD automatically. Example:

/ETA 1425/ = ETA of 14:25Z.

/FE xxxx/ This keyword is used to identify the Flight Engineer for the Flight. The corresponding Flight Engineer's name will be printed on the flight plan. Example:

/FE 1026 = Flight Engineer code 1026.
/FE J NORTON/ = Flight Engineer name F NORTON.

/FLTDY nn/ This keyword should be used when the ETD of your Flight is past the current time in Zulu/GMT. This is to ensure the system computes the Flight Plan for the correct Departure Day. Example:

/FLTDY 12/ = sets the Departure Day to 12.

/FO xxxx/ This keyword is used to identify the First Officer for the Flight. The corresponding First Officer's name will be printed on the flight plan. Example:

/FO 1026 = First Officer code 1026.
/FO T LEFTY/ = First Officer name T Lefty.

/MAIL xxxxx/ This keyword allows you to send the Flight Plan to E-Mail addresses (via the Internet). Note: If the system encounters any errors, the error messages will only be sent to the originating address only. Example:

/MAIL JSMITH@AIRLINE.COM/ = Send Flight Plan to E-Mail recipient(s).

/NOMSTR/ This keyword instructs the system to not use the Airline's MASTER Macro (if available). Example:

/NOMSTR/ = Do not use the Airline MASTER macro.

/NORECALL/ This keyword instructs the system to not use the Flightplan RECALL feature. Example:

/ NORECALL / = Disable the RECALL feature..

/PAX xxx/ This keyword specifies the number of passengers. Example:

/PAX 50/ = 50 passengers.

/PAXWT xxx/ This keyword specifies the average weight to use for each passenger. The system uses a default weight of 200 Lbs for Imperial aircraft and 91 Kgs for Metric aircraft. Example:

/PAXWT 190/ = Use average passenger weight of 190 Lbs.

/RMKS xxxxx/ This keyword allows you to add plain language text information or remarks to the body of the flight plan. Usually printed on the top of the plan. Example:

/RMKS PLS HOLD FOR CAPT SMITH/ = Remarks

4. Flight Planning Keywords

Overview

This section describes all the Keywords that are used to request and produce a computer generated optimized Flight Plan. The Keywords are listed in alphabetic order.

Each keyword is described using the following convention:

KEYWORD - Actual parameter keyword to be used when providing input for the Flight Plan Request.

TYPE - Describes the maximum length and data type of the parameter input for the keyword:

- A=Alphabetic Input Only
- N=Numeric Input Only
- AN=Alpha-Numeric Input

DESCRIPTION - Brief Description of the keyword with examples.

Example:

KEYWORD	TYPE	DESCRIPTION
ACFT	**8-AN**	**Aircraft Identification**

This keyword contains either the Aircraft's FIN Identification Number (normally the last 3 or 4 Digits of the Aircraft Registration) or the Aircraft's Registration Number for the actual Airframe to be used for the Flight.

Example: /ACFT 3GA/
/ACFT N823GA/

Definitions

ACFT **8-AN** **Aircraft Identification**

This keyword contains either the Aircraft's FIN Identification Number (normally the last 3 or 4 Digits of the Aircraft Registration) or the Aircraft's Registration Number for the actual Airframe to be used for the Flight.

NOTE: There may be instances when an aircraft may have multiple configurations defined under different FIN numbers but all having the same Aircraft Registration. In this situation, please use the FIN number to ensure the correct aircraft information is use for the flightplan.

Example: /ACFT 3GA/ (use FIN number)
/ACFT N823GA/ (use Registration number)

ADF **3-N** **Additional Fuel**

Default as defined in the Airline Parameter File. This keyword is used to specify the Additional Fuel required allowing for air traffic congestion, poor weather conditions, etc. The flight plan will be computed to ensure that the amount requested will be on board overhead destination.

Example: /ADF 50/ (set ADF to 5000 Lbs.)
/ADF/ (set ADF to 0)

ADR **60-AN** **Additional Return Addresses**

This keyword is used to specify up to seven (7) additional addresses for sending the Flight Plan to. If the system encounters any errors, the error messages will only be sent to the originating address only.

Example: /ADR ADDRES1 ADDRES2/

AFIS **1-A** **AFIS Flight Plan**

This keyword is used to request an AFIS Flight Plan for a FINALIZED Flight Plan. When this keyword is used, an AFIS plan will be generated and automatically sent to the selected AFIS provider (Global or Arinc). A confirmation message will be sent notifying you that the AFIS plan was sent.

NOTE: You must have an account setup with the appropriate AFIS provider (Global or Arinc). Please contact Skyplan for more information.

Example:	/AFIS G/	(request a Global AFIS plan)
	/AFIS A/	(request an Arinc AFIS plan)

ALC **3-AN** **Airline Code**

Default is the same as the APF value. This keyword is used to specify the 3-letter Airline Code. This code is prefixed to the flight number (**FLTNO**) to generate the complete Flight Number in the flight plan.

Example: /ALC XYZ/

ALTN1 **4-AN** **Destination Alternate 1**

Default is the closest Airport as defined in the Airport Alternates Database. This keyword is used to specify the designator in ICAO/IATA or FAA format for the desired Destination Alternate Airport.

Use "ISLD" to invoke the Island Fuel Reserve Policy. Use "NONE" to suppress the Alternate Calculation (i.e.: no alternate to be used).

Example:	/ALTN1 YUL/	(use specific Airport)
	/ALTN1 EGDD/	(use specific Airport)
	/ALTN1/	(use closest Alternate Airport)
	/ALTN1 ISLD/	(use Island Reserve Policy)
	/ALTN1 NONE/	(No Alternate Calculation)

ALTN2 **4-AN** **Destination Alternate 2**

Default is None. This keyword is used to specify the designator in ICAO/IATA or FAA format for a secondary Destination Alternate Airport. This airport must not be farther to the Destination Airport than the primary Destination Alternate (**ALTN1**).

Example:	/ALTN2 YMX/	(Use specific Airport)
	/ALTN2 EGDE/	(Use specific Airport)
	/ALTN2/	(do not use a 2nd Alternate)
	/ALTN2 NONE/	(do not use a 2nd Alternate)

ALTNFL **3-N** **Dest Alternate 1 Maximum Flight Level**

Default as defined in the Airport Alternates Database. This keyword is used to cap the flight at a particular altitude..

Example:	/ALTNFL 150/	(capped at 15,000 feet)
	/ ALTNFL/	(no restriction on Flight Level)
	/ ALTNFL UNL/	(no restriction on Flight Level)

ALTPROF **60-AN** **Altitude Profile**

Default is None. This keyword is used to provide a desired flight level for the flight plan between specific waypoints along the planned route. Use "OPT" to let the system determine the optimum altitude.

Example:

/ALTPROF GTK 280/
(Attempt to achieve altitude of FL280 from waypoint GTK to Destination)

/ALTPROF GTK 310 COSMO/
(Attempt to achieve altitude of FL310 from waypoints GTK to COSMO)

/ALTPROF GTK 310 COSMO OPT BARTS 290/
(Attempt to achieve altitude of FL310 from waypoints GTK to COSMO, optimal altitude from waypoints COSMO to BARTS, FL290 from waypoints BARTS to Destination)

/ALTPROF 075/
(Attempt to achieve altitude of FL075 when using a DIRECT route **/RTE DCT/**)

/ALTPROF CYYC 075/
(Attempt to achieve altitude of FL075 from Origin to Destination)

APF **3-A** **Airline Parameter File**

Default is the 3-letter IATA Airline code (see ALC). This keyword is used to specify what Airline Specific Parameters are to be used when computing the Flight Plan. These Parameters are:

- Flight Plan Format
- Domestic US ATC Code
- En-route Lookdown Capability
- NAT Track Step Climb Capability
- Print EET for ATC Waypoints
- Print Compulsory Waypoints
- Default Additional Fuel
- Domestic Reserve Policy
- International Reserve Policy

Example: /APF ABC/

ATCADR **60-AN** **ATC Copy Flight Plan Addresses**

This keyword is used to specify up to seven (7) additional addresses for sending the ATC Flight Plan to.

Example: /ATCADR ADDRES1 ADDRES2/

ATCALTN **60-AN** **ATC Alternate Airport Name**

Default is None. This keyword is used to provide the Name of alternate aerodrome(s) in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCALTN CALGARY INTL/

ATCCODE **6-AN** **ATC Aircraft Address**

Default is None. This keyword is used to provide the hexadecimal aircraft address in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCCODE F00123/

ATCCOM **50-AN** **ATC Additional Comm Equipment**

Default is None. This keyword is used to provide significant data related to communication equipment as required by the appropriate ATS authority, in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCCOM UHF ONLY/

ATCDAT **50-AN** **ATC Additional Data Link Equipment**

Default as specified in the Aircraft Database. This keyword is used to provide significant data related to the Data link Equipment as defined in the Aircraft database for Air Traffic Control purposes in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCDAT NO ACARS/

ATCDEP **50-AN** **ATC Departure Airport Name**

Default is None. This keyword is used to provide the Name of departure aerodrome in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCDEP CALGARY INTL/

ATCDEST **50-AN** **ATC Destination Airport Name**

Default is None. This keyword is used to provide the Name of destination aerodrome in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCDEST CALGARY INTL/

ATCDLE **60-AN** **ATC Enroute Delay**

Default is None. This keyword is used to specify an Enroute delay in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCDLE MDG0030/

ATCDOF **6-AN** **ATC Day of Flight**

Default is None (if non-Eurocontrol/IFPS airspace). This keyword is used to specify the Day of Flight in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example:	/ATCDOF/	(computed DOF)
	/ATCDOF Y/	(computed DOF)
	/ATCDOF N/	(suppress DOF)
	/ATCDOF 130628/	(user-defined DOF)

ATCEQ1 **1-A** **ATC COM/NAV Equipment Flag**

Default as specified in the Aircraft Database. This keyword is used to override the COM/NAV Equipment flag (N,S) for Air Traffic Control purposes in Item 10a of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCEQ1 N/

ATCEQ2 **45-AN** **ATC COM/NAV/Approach Aid Equipment**

Default as specified in the Aircraft Database. This keyword is used to override the COM/NAV/Approach Aid Equipment available and serviceable on the aircraft for Air Traffic Control purposes in Item 10a of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCEQ2 CEKU/

ATCEQ3 **20-AN** **ATC Surveillance Codes**

Default as specified in the Aircraft Database. This keyword is used to override the Surveillance (SSR) Equipment (Transponder Code) available and serviceable for Air Traffic Control purposes in Item 10b of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCEQ3 N/

ATCFIL **1-A** **ATC File Flight Plan**

This keyword is used to file the FINALIZED Flight Plan with the appropriate ATC FIRs. A copy of the ATC flight plan is sent to the originating address as confirmation the Plan has been filed.

Example: /ATCFIL Y/ (file flight)
/ATCFIL R/ (re-file previously filed flight)

ATCFILTM **4-N** **ATC File Time**

This keyword is used to specify the time (in Zulu) when to file the FINALIZED Flight Plan with the appropriate ATC FIRs. This will instruct the FPE to hold the ATC filing until the specified time.

Example: /ATCFILTM 2030/ (send the ATC Filing at 2030Z)

ATCI19 **1-A** **ATC Include Supplementary Information**

Default as defined in the Airline Parameter File. This keyword is used to instruct the system to include the system generated Item 19 fields (Supplementary Information). This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCI19/ (Include Item 19)
/ATCI19 N) (Suppress Item 19)

ATCI19A **25-A** **ATC Aircraft Colors**

Default as specified in the Aircraft Database. This keyword is used to provide colour of the aircraft and significant markings in Item 19 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCI19A BLUE AND WHITE/

ATCI19D1 **2-N** **ATC Number of Dinghies**

Default as specified in the Aircraft Database. This keyword is used to provide the number of dinghies carried on the Aircraft in Item 19 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCI19D1 6/

ATCI19D2 **3-N** **ATC Total Capacity of all Dinghies**

Default as specified in the Aircraft Database. This keyword is used to provide the total capacity, in persons, of all dinghies carried on the Aircraft in Item 19 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCI19D2 100/

ATCI19D3 **1-A** **ATC Dinghy Cover**

Default as specified in the Aircraft Database. This keyword is used to indicate if the dinghies are covered in Item 19 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCI19D3 C/

ATCI19D4 **17-A** **ATC Dinghy Color**

Default as specified in the Aircraft Database. This keyword is used to indicate the color of the dinghies carried on the Aircraft in Item 19 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCI19D4 RED/

ATCI19J **4-A** **ATC Life Jackets**

Default as specified in the Aircraft Database. This keyword is used to provide the type of Life Jackets (L,F,U,V) on the Aircraft in Item 19 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCI19J LF/

ATCI19N **60-AN** **ATC Other Remarks**

Default is None. This keyword is used to provide any other survival equipment carried and any other remarks regarding survival equipment in Item 19 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCI19N SATELITE PHONE/

ATCI19P **3-N** **ATC Persons on Board**

Default is TBN. This keyword is used to provide the total number of persons (passengers and crew) on board, when required by the appropriate ATS authority, in Item 19 of the ATC ICAO flight plan. Insert TBN (to be notified) if the total number of persons is not known at the time of filing. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCI19P TBN/ (to be notified)
/ ATCI19P 10/ (10 persons on board)

ATCI19R **3-A** **ATC Emergency Radio**

Default as specified in the Aircraft Database. This keyword is used to provide the type of Emergency Radio(s) (U, V, E) on the Aircraft in Item 19 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCI19R UV/

ATCI19S **4-A** **ATC Survival Equipment**

Default as specified in the Aircraft Database. This keyword is used to provide the type of Survival Equipment (P,D,M,J) on the Aircraft in Item 19 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCI19S PM/

ATCNAV **50-AN** **ATC Additional Nav Equip Information**

Default is None. This keyword is used to provide significant data related to navigation equipment as required by the appropriate ATS authority, in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCNAV INS/

ATCOPR **60-AN** **ATC Operator Name**

Default is None. This keyword is used to provide the Name of the operator in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCOPR ABC AILRLINES/

ATCORGN **30-AN** **ATC Originator Contact Information**

Default is None. This keyword is used to specify the originator's contact information in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCORGN CYYCXXSH/

ATCPBN **16-AN** **ATC Performance Based Navigation**

Default is None. This keyword is used to provide the performance based navigation codes as required by the appropriate ATS authority, in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCPBN B1O1/

ATCPER **1-A** **ATC Aircraft Performance Data**

Default is None. This keyword is used to provide the aircraft performance data as required by the appropriate ATS authority, in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCPER B/

ATCRALT **60-AN** **ATC Enroute Alternate Airport Name**

Default is None. This keyword is used to provide the Name of enroute alternate aerodrome(s) in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCRALT CALGARY INTL/

ATCREG **8-AN** **ATC Aircraft Registration**

Default as specified in the Aircraft Database. This keyword is used to override the registration markings of the aircraft in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCREG N12ABC/

ATCRFP **2-AN** **ATC Replacement Flight Plan**

Default is None. This keyword is used to specify the Replacement Flight Plan (Item 18). If used, enter a "Q" followed by a digit (1-9). This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCRFP Q1/

ATCRMK **240-AN** **ATC Flight Plan Remarks**

Default is None. This keyword is used to provide a remark in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCRMK MEDIVAC FLIGHT/

ATCRVR **3-N** **ATC Runway Visual Range**

Default is None. This keyword is used to specify the Runway Visual Range (Item 18). Specify the minimum RVR requirement for the flight (in meters). It may be used for air traffic flow management (ATFM) purposes. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCRVR 500/

ATCSEL **4-A** **ATC SELCAL Code**

Default is None. This keyword is used to provide the SELCAL Code, if so prescribed by the appropriate ATS authority, in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCSEL BMDL/

ATCSTS **60-AN** **ATC Reason for Special Handling**

Default is None. This keyword is used to provide the reason for special handling by ATS in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC. The following codes are available:

ALTRV	Flight operated in accordance with an altitude reservation
ATFMX	Flight approved for exemption from ATFM measures by the appropriate ATS authority

FFR	Fire-fighting
FLTCK	Flight check for calibration of navaids
HAZMAT	Flight carrying hazardous material
HEAD	Flight with Head of State status
HOSP	Medical flight declared by medical authorities
HUM	Flight operating on a humanitarian mission
MARSA	Flight for which a military entity assumes responsibility for separation of military aircraft
MEDEVAC	Life critical medical emergency evacuation
NONRVSM	Non-RVSM capable flight intending to operate in RVSM airspace
SAR	Flight engaged in a search and rescue mission
STATE	Flight engaged in military, customs or police services

Example: /ATCSTS MEDEVAC/

ATCSUR **50-AN** **ATC Additional Surveillance Equipment**

Default is None. This keyword is used to provide significant data related to surveillance equipment as required by the appropriate ATS authority, in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCSUR NO ADS-B/

ATCTALT **60-AN** **ATC Takeoff Alternate Airport Name**

Default is None. This keyword is used to provide the Name of takeoff alternate aerodrome(s) in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCTALT CALGARY INTL/

ATCTYP **60-AN** **ATC Number/Type of Aircraft**

Default is None. This keyword is used to provide the Type(s) of aircraft, preceded if necessary by the number of aircraft, as required by the appropriate ATS authority, in Item 18 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCTYP 2F15 5F5 3B2/

ATCWT **1-A** **ATC ICAO Wake Turbulence Category**

Default as specified in the Aircraft Database. This keyword is used to override the ICAO Wake Turbulence Category (L,M,H) for Air Traffic Control purposes in Item 9 of the ATC ICAO flight plan. This keyword must be used when requesting the Flight Plan, not when filing the Flight Plan with ATC.

Example: /ATCWT H/

AUTOSEC **2-AN** **Automatic Secondary Flight Plans**

This keyword is used to indicate whether to calculate an Automatic Secondary Flight Plan:

/AUTOSEC Y/ = Auto Secondary Plan (AUTOSEC 1)
/AUTOSEC N/ = Disable Auto Secondary Feature

When requested, the Secondary Flight Plans are:

AUTOSEC 1:
- Secondary 1 - Next Lowest Flight Level
- Secondary 2 - Initial Flight Level

AUTOSEC 2:
- Secondary 1 – Long Range Cruise (/CRZ LRC/)
- Secondary 2 - Next Lowest Flight Level with requested Cruise Mode (from Primary FP)

AUTOSEC 3:
- Secondary 1 - Next Lowest Flight Level
- Secondary 2 - Next Lowest Flight Level (from Sec FP 1)

Note: If Secondary flight plan cannot run with specified the CRZ mode, the system will try with /**CRZ LRC**/.

AUTOSEC 4: For use in Standard Airspace
- Secondary 1 - Next Highest Flight Level
- Secondary 2 - Next Lowest Flight Level

Note: Use /**FL nnn**/ keyword to cap the Primary Plan flight level. Otherwise, Secondary 1 will report the same values as the Primary Plan.

AUTOSEC 5: For use in NAT RVSM Airspace
- Secondary 1 - Next Highest Flight Level
- Secondary 2 - Next Lowest Flight Level

Note: Use /**FL nnn**/ keyword to cap the Primary Plan flight level. Otherwise, Secondary 1 will report the same values as the Primary Plan.

AUTOSEC 6: For use in RVSM Airspace (excl NAT RVSM)
- Secondary 1 - Next Highest Flight Level
- Secondary 2 - Next Lowest Flight Level

Note: Use /**FL nnn**/ keyword to cap the Primary Plan flight level. Otherwise, Secondary 1 will report the same values as the Primary Plan.

AUTOSEC 7:

- Secondary 1 - Next Highest Flight Level
- Secondary 2 - Next Lowest Flight Level
- Secondary 3 - Next Lowest Flight Level (from Sec FP 2)

Note: If Secondary flight plan cannot run with specified the CRZ mode, the system will try with /**CRZ LRC**/.

Example: /AUTOSEC Y/ (Calc. Auto Secondary Plans)
/AUTOSEC 3/ (Calc. Auto Secondary Plans)
/AUTOSEC N/ (No Auto Secondary Plans)

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CAPT **20-AN** **Captain**

Default is None. This keyword is used to identify the Captain of the Flight.

Example: / CAPT 1024/ (specify Captain Code)
/ CAPT FRED/ (specify Captain Name)
/ CAPT SMITH 00124/
(specify Captain Name and Employee nbr)

CARGO **6-N** **Cargo**

Default is None. This keyword is used to specify the cargo weight. This keyword is used in conjunction with the **PAX** keyword.

Note: Use the **PYLD** keyword as an alternative way of specifying Payload.

Example: /CARGO 250/ (25,000 of cargo)

CITM **2-N** **Circuit Time at Origin**

Default as specified in the Airport Database. This keyword is used to override the Circuit Time at the origin airport (in minutes). The time value cannot exceed 20 minutes.

Example: /CITM 10/

CITMD **2-N** **Circuit Time at Destination**

Default as specified in the Airport Database. This keyword is used to override the Circuit Time at the destination airport (in minutes). The time value cannot exceed 20 minutes.

Example: /CITMD 10/

CLBB **5-N** **Climb Bias - Percentage**

Default as specified in the Aircraft Database. This keyword is used to override the bias percentage for Climb fuel burn. The bias must be between 0.900 and 1.250.

Example: /CLBB 0.950/

CLBFUELB **5-N** **Climb Bias - Fuel**

Default as specified in the Aircraft Database. This keyword is used to override the bias fuel for Climb fuel burn. The bias must be between -9900 and +9900 lbs or kgs.

Example: /CLBFUELB 110/

CLBTIMEB **3-N** **Climb Bias - Time**

Default as specified in the Aircraft Database. This keyword is used to override the bias time for Climb fuel burn. The bias must be between -59 and +59 minutes.

Example: /CLBTIMEB 10/

COMP **4-N** **Wind Component**

Default is Current Wind Forecast. This keyword is required if the ISA Deviation (see **ISA**) is provided. This keyword is used to specify the Wind Component to be used in calculating the Flight Plan.

Example: /COMP -5/ (specifies a 5kt Headwind)
/COMP 15/ (specifies a 15kt Tailwind)
/COMP/ (use Current Wind Forecast)

CONF **1-N** **Empty Operating Weight Configuration**

Default is "0". This keyword is used to select a different Empty Operating Weight Configuration (ie: Passenger, Cargo, or Combi). Input must be 0, 1, or 2.

Example: /CONF 1/

CRZ **3-AN** **Cruise Mode**

Default as defined in the Aircraft Database. This keyword is used to override to default cruise mode of the aircraft (LRC-Long Range Cruise, a fixed Mach value, or a customized cruise mode).

Note: The system will automatically use lower Mach number(s) and/or LRC cruise data if it cannot use the selected Mach number for the cruise portion of the flight. A warning message will be displayed if this is the case.

Example:	/CRZ LRC/	(Long Range Cruise mode)
	/CRZ HSC/	(High Speed Cruise mode)
	/CRZ 82/	(Mach .82 Cruise speed)

CRZB **5-N** **Cruise Bias - Percentage**

Default as specified in the Aircraft Database. This keyword is used to override the bias percentage for Cruise fuel burn. The bias must be between 0.900 and 1.250.

Example: /CRZB 1.010/

DEST **4-AN** **Destination Station**

This keyword contains the designator in ICAO/IATA or FAA format for the Destination Airport.

Note: The destination airport can be the same as the origin airport (for training flight, sight-seeing flight, etc).

Example: /DEST YYZ/ (specify Destination Airport)

DEVTYP **3-A** **Requesting Workstation Device Type**

This keyword is used to identify the type of workstation used to request a flightplan. When used, it instructs the Flight Planning system to ensure the response is compatible with the receiving workstation (i.e.: returns the flight plan as an attachment so it can be viewed properly).

Note: Only supported with requests via E-Mail.

Example: /DEVTYP PPC/ (specify Pocket PC)

DSCB **5-N** **Descent Bias - Percentage**

Default as specified in the Aircraft Database. This keyword is used to override the bias percentage for Descent fuel burn. The bias must be between 0.900 and 1.250.

Example: /DSCB 0.900/

DSCFUELB **5-N** **Descent Bias - Fuel**

Default as specified in the Aircraft Database. This keyword is used to override the bias fuel for Descent fuel burn. The bias must be between -9900 and +9900 lbs or kgs.

Example: /DSCFUELB -80/

DSCTIMEB **3-N** **Descent Bias – Time**

Default as specified in the Aircraft Database. This keyword is used to override the bias time for Descent fuel burn. The bias must be between -59 and +59 minutes.

Example: /DSCTIMEB 10/

DXPR **20-AN** **Dispatcher**

Default is "9999" (Sita Interface). This keyword is used to identify the dispatcher who requested the Flight Plan. You can specify your pre-stored dispatcher code or your name.

Example: /DXPR 1027/ (specify Dispatcher Code)
/DXPR FRED/ (specify Dispatcher Name)
/DXPR SMITH 00127/
(specify Dispatcher Name and Employee number)

ENRT **4-AN** **En-route WX/ETP Airports (1-6 Airports)**

ETP=N: Default is NO. This keyword is used to specify En-route WX Airports.

ETP=Y: This keyword is used to specify the Coasting Out/In Airports for ETP calculations.

Example: /ENRT YEG YWG/ (specify En-route Airports)
/ENRT/ (do not use any En-route Airports)

ENRTWX **4-AN** **En-route WX Airports (1-12 Airports)**

This keyword is used to specify En-route WX Airports.

Example: /ENRTWX YEG YWG/ (specify En-route Airports)
/ENRTWX/ (do not use any En-route Airports)

EOP **---** **End of Primary**

This keyword is used to identify the end of the Primary Flight Plan Request within a complex Flight Plan Request Message.

Example: /EOP/

EOR **---** **End of Request**

This keyword is used to identify the end of the Flight Plan Request message.

Example: /EOR/

EOS **---** **End of Secondary**

This keyword is used to identify the end of the Secondary Flight Plan Request within a complex Flight Plan Request Message.

Example: /EOS/

EOW **7-N** **Empty Operating Weight**

Default is the Empty Operating Weight as selected (see **CONF**) from the Aircraft Database. This keyword is used to override the Empty Operating Weight of the aircraft for this flight plan only. It cannot be less than the minimum operating weight of the aircraft.

Example: /EOW 85000/ (set EOW to 85000 Lbs.)

ETA **4-N** **Estimated Time of Arrival**

This keyword contains the Estimated Time of Arrival for the flight in Zulu. If used without the **ETD** keyword, the system will compute the Estimated Time of Departure.

Example: /ETA 1425/

ETD **4-N** **Estimated Time of Departure**

This keyword contains the Estimated Time of Departure for the flight in Zulu. If not specified, you must use the **ETA** keyword to instruct the system to compute the Estimated Time of Departure.

Example: /ETD 1200/

ETOP **1-AN** **3-ETP Calculation**

This keyword is used to instruct the system to generate a flight plan with 3 Equal Time Point scenarios. You must specify ETP stations using the **ENRT** keyword.

Please refer to Section 3 – ETOPS for a description of available 3-ETP types.

NOTE: The required aircraft performance data must be available for this keyword to work correctly. Please contact Skyplan for more information.

Example: /ETOP 1/ (3-ETP Type 1)
/ETOP Y/ (Customer Default)

ETOPSTN **64-AN** **ETOPS Route Compliance Stations**

This keyword contains up to 13 airports to be used in the ETOPS Route Compliance test.

Example: /ETOPSTN RJAW PWAK PHNL/

ETOPTM **3-N** **ETOPS Route Compliance Time**

This optional keyword is used to override the aircraft's default ETOPS time (in minutes). The value specified cannot be greater than the ETOPS time defined for the aircraft in the Aircraft Database.

Example: /ETOPTM 90/

ETOW **7-N** **Estimated Take-off Weight**

Default is "0" (system will calculate). This keyword is used to specify the actual take-off weight to ensure the flight plan is computed correctly (i.e.: more fuel is on board because the destination was changed after the aircraft was fuelled).

Example: /ETOW 1450/ (set ETOW to 145000 Lbs.)

ETP **2-AN** **Equal Time Points**

Default is "N". This keyword is used to indicate whether Equal Time Points will be calculated. Input must be either N for No (No ETP calculation), or Y for Yes (use default Airline ETP Policy), or 1-NN for the desired ETP policy. You must specify ETP stations using the **ENRT** keyword.

Please refer to Section 3 – Equal Time Points for a description of available ETP policies.

Example: /ETP Y/ (use default Airline ETP Policy)
/ETP 4/ (use ETP Policy 4)

ETPCRZ **3-AN** **ETP Cruise Mode**

Default is LRC. This keyword is used to specify the Cruise Speed to be used for the Oxygen Depressurization ETP / 3-ETP calculations.

Example: /CRZ HSC/ (High Speed Cruise mode)
/CRZ 82/ (Mach .82 Cruise speed)

ETPFL1 **3-N** **ETP Initial Level-Off Altitude**

Default is FL230. This keyword is used to specify the Initial Level-Off Altitude to use for the Oxygen Depressurization ETP / 3-ETP calculations.

Example: /ETPFL1 250/ (Initial Lvl-Off at 25,000 Feet)

ETPFL2 **3-N** **ETP Final Level-Off Altitude**

Default is FL100. This keyword is used to specify the Final Level-Off Altitude to use for the Oxygen Depressurization ETP / 3-ETP calculations.

Example: /ETPFL2 110/ (Final Lvl-Off at 11,000 Feet)

ETPOXYTM **3-N** **ETP Oxygen Duration**

Default is 30 minutes. This keyword is used to specify the Oxygen Duration (in minutes) to use for the Oxygen Depressurization ETP / 3-ETP calculations.

Example: /ETPOXYTM 45/ (45 minutes of Oxygen)

FE **20-AN** **Flight Engineer**

Default is None. This keyword is used to identify the Flight Engineer of the Flight.

Example: / FE 1026/ (specify Flight Engineer Code)
/ FE JOHN/ (specify Flight Engineer Name)
/ FE NORTON 00126/
(specify Flight Engineer Name and Employee nbr)

FL **3-AN** **Maximum Flight Level**

Default is None. This keyword is used to cap the flight at a particular altitude. It is also used to override a pre-defined flight Cap altitude for the selected route (from the Route Database).

Example: /FL 150/ (capped at 15,000 feet)
/FL 282/ (capped at 28,200ft / 8600 meters)
/FL/ (no restriction on Flight Level)
/FL UNL/ (no restriction on Flight Level)
/FL 0/ (no restriction on Flight Level)

FLTDY **2-N** **Flight Day**

Default is the Current Date. This keyword is used to override the Default Flight Day with the Actual Flight Date. The Flight Day cannot be less than 2 days or more than 4 days from the Current Date.

Example: /FLTDY 12/

FLTNO **4-AN** **Flight Number**

This keyword contains the Flight Number to be used for the Flight Plan. Entering "TEST" will request a short plan (i.e.: for testing only - ICAO Flight Plan is not generated). FLTNO is used in conjunction with ALC to produce the Flight Number on the ICAO Flight Plan (i.e.: XYZ0001).

Example: /FLTNO 0001/ (specifies Flight Number)
/FLTNO TEST/ (TEST Flight Plan request)

FMT **2-N** **Flight Plan Format**

Default as specified in the Aircraft Database record (if defined) or selected Airline Parameter File (see APF). This keyword is used to override the default Flight Plan format to be used.

Example: /FMT 03/

FO **20-AN** **First Officer**

Default is None. This keyword is used to identify the First Officer of the Flight.

Example: / FO 1025/ (specify First Officer Code)
/ FO TOM/ (specify First Officer Name)
/ FO LEFTY 00125/
(specify First Officer Name and Employee nbr)

HLDB **5-N** **Hold Bias - Percentage**

Default as specified in the Aircraft Database. This keyword is used to override the bias percentage for Hold fuel burn. The bias must be between 0.900 and 1.250.

Example: /HLDB 1.250/

HLDFL **3-N** **Hold Flight Level at Destination**

Default is 1,500 feet. This keyword is used to override the default Hold Flight Level over the Destination Airport.

Example: /HLDFL 100/

HLDFUELB **5-N** **Hold Bias - Fuel**

Default as specified in the Aircraft Database. This keyword is used to override the bias fuel for Hold fuel burn. The bias must be between -9900 and +9900 lbs or kgs.

Example: /HLDFUELB 450/

HLDTIMEB **3-N** **Hold Bias - Time**

Default as specified in the Aircraft Database. This keyword is used to override the bias time for Hold fuel burn. The bias must be between -59 and +59 minutes.

Example: /HLDTIMEB 10/

HLDTM **3-N** **Hold Time at Destination**

Default is 30 minutes. This keyword is used to override the default Hold Time (Fuel) over the Destination Airport.

Example: /HLDTM 45/

IFREGN **1-A** **ATC Aircraft Registration Flight Number**

This keyword is used to instruct the system to use the aircraft's Registration Number as the Flight Number for Air Traffic Control Purposes. The system default is Airline Code/Flight Number (ALC+FLTNO).

Example: /IFREGN/ (use the Aircraft Registration)
/IFREGN Y/ (use the Aircraft Registration)
/IFREGN N/ (use the Airline Code/FltNbr)

IFRULE **1-A** **ATC Flight Rule**

Default is "I" (IFR). This keyword is used to specify the flight rule for Air Traffic Control purposes. The following types are available:

- "I" for Instrument Flight Rule (IFR)
- "V" for Visual Flight Rule (VFR)
- "Y" for IFR to VFR
- "Z" for VFR to IFR

Example: /IFRULE V/ (set to VFR flight rule)

IFTYP **1-A** **ATC Flight Type**

Default is "S" (Scheduled). This keyword is used to specify the type of flight for Air Traffic Control purposes. The following types are available:

- "S" for Scheduled Flight
- "N" for Non-Scheduled Flight
- "G" for General Aviation
- "M" for Military Airlift Command
- "X" for Other/Special Flight

Example: /IFTYP N/

ISA **3-N** **ISA Deviation**

This keyword is required if the Wind Component (see **COMP**) is provided. This keyword is used to specify the ISA Deviation to be used in calculating the Flight Plan.

Example: /ISA -3/ (3 degrees colder than std dev)
/ISA 5/ (5 degrees warmer than std dev)

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MACRA **12-AN** **Macro Maintenance - Add**

This keyword is used to create a Flight Plan Request macro that contains one or more keywords for later use within a Flight Plan Request.

Note: This option must appear alone on the line following the FPREQ line).

Example:
MACRA FLT123/... flight plan request keywords …/EOR/

MACRC **12-AN** **Macro Maintenance - Change**

This keyword is used to revise a Flight Plan Request macro that contains one or more keywords for later use within a Flight Plan Request.

Note: This option must appear alone on the line following the FPREQ line).

Example:
MACRC FLT123/... flight plan request keywords …/EOR/

MACRD **12-AN** **Macro Maintenance - Delete**

This keyword is used to delete a Flight Plan Request macro.

Note: This option must appear alone on the line following the FPREQ line).

Example: MACRD FLT123/EOR/

MACRL **12-AN** **Macro Maintenance - List**

This keyword is used to get information about all your Flight Plan Request macros.

Note: This option must appear alone on the line following the FPREQ line).

Example:
MACRL FLT123/EOR/ (returns the content of the macro)
or
MACRL/EOR/ (returns the names of all stored macros)

MAIL **200-AN** **E-Mail Addresses**

This keyword is used to specify additional E-Mail addresses for sending the Flight Plan to (via the Internet). If the system encounters any errors, the error messages will only be sent to the originating address only.

Example: /MAIL FRED@ABC.COM JOHN@ABC.COM/

MLF **6-N** **Minimum Landing Fuel**

Default as defined in the Aircraft Database. This keyword is used to override the Minimum Landing Fuel required at destination.

Example: /MLF 14500/ (set MLF to 14500 kilograms)

MLW **7-N** **Maximum Landing Weight**

Default is the Maximum Structural/Tankerage Landing weight from the Aircraft Database. This keyword is used to override Maximum Landing Weight of the aircraft for this flight plan only. It cannot be more than the maximum Structural/Tankerage Landing weight of the aircraft.

Example: /MLW 1300/ (set MLW to 130000 Lbs.)

MTOW **7-N** **Maximum Take-off Weight**

Default is the Maximum Take-Off weight from the Aircraft Database. This keyword is used to override Maximum Take-Off Weight of the aircraft for this flight plan only (i.e.: maximum take-off weight limited due to runway length, temperature, altitude, etc).

Example: /MTOW 140000/ (set MTOW to 140000 Lbs.)

NOMSTR **---** **Disable MASTER Macro**

This keyword is used to instruct the system to not use the Airline's MASTER Macro keywords.

Example: /NOMSTR/ (do not use Airline MASTER macro)

NORECAL L **---** **Disable RECALL feature**

This keyword is used to instruct the system to not use the Flightplan RECALL feature. Pleas note that you will be unable to use the RECALL keyword to recall/rerun the flightplan.

Example: /NORECALL/ (disable the RECALL feature)

ORIG **4-AN** **Originating Station**

This keyword contains the designator in ICAO/IATA or FAA format for the Originating Airport.

Example: /ORIG YYC/ (specify Origin Airport)
/ORIG EGKK/ (specify Origin Airport)

PAX **3-N** **Passengers**

Default is "0". This keyword specifies the number of passengers.

Example: /PAX 50/ (set passenger load to 50)
/PAX 0/ (set passengers and payload to 0)

PAXWT **3-N** **Passenger Weight**

This keyword specifies the average weight to use for each passenger. If not specified, the system uses a default weight of 200 Lbs for Imperial aircraft and 91 Kgs for Metric aircraft.

Example: /PAXWT 190/ (Use average weight of 190 Lbs)

PYLD **6-AN** **Payload**

Default is "0". This keyword is used to specify the actual payload. Use the "MAX" option to let the system calculate the Maximum Payload to be carried. Total payload cannot exceed the Empty Zero Fuel Weight (EZFW) of the aircraft.

Note: Use the **PAX**, **PAXWT**, **CARGO** keywords as an alternative way of specifying Payload.

Example: /PYLD 800/ (set payload to 80,000)
/PYLD MAX/ (Max Payload calculation)
/PYLD/ (set Payload to 0)

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RCALTN **4-AN** **Reclear Alternate**

This keyword is required if a Re-clearance Calculation is requested. Default is the closest Airport as defined in the Airport Alternates Database. This keyword is used to specify the designator in ICAO/IATA or FAA format for the desired Re-clearance Alternate Airport.

Use "ISLD" to invoke the Island Fuel Reserve Policy. Use "NONE" to suppress the Alternate Calculation (i.e.: no alternate to be used).

Example: /RCALTN YPG/
/RCALTN/ (use closest Alternate Airport)
/RCALTN ISLD/ (use Island Reserve Policy)
/RCALTN NONE/ (No Alternate Calculation)

RCDEST **4-AN** **Reclear Destination**

This keyword is required if a Re-clearance Calculation is requested. This keyword is used to specify the designator in ICAO/IATA or FAA format for the Re-clearance Destination Airport.

Example: /RCDEST YWG/

RCPNT **15-AN** **Reclear Point**

Default is None. This keyword is used to specify the en-route waypoint from which a re-clearance is to be computed. The specified waypoint must be on the route structure.

Example: /RCPNT ABR/ (specify Reclear Waypoint)
/RCPNT/ (do not calculate Reclear)

RECALL **6-N** **Flight Plan Recall Number**

This keyword will retrieve a prior requested flight plan and associated keywords that will be used as a basis to generate a new flight plan (i.e.: recalled keywords and current keywords will be combined).

Example: /RECALL 000123/

RMKS **480-AN** **Flight Plan Remarks**

Default is None. This keyword is used to provide a remark to be printed in the body of the flight plan (usually at the top of the plan). You can input up to 12 lines of text (maximum of 60 characters on each line).

Example:
/RMKS ATTN CAPT OF FLT ABC001/

/RMKS ATTN CAPT OF FLT ABC001 ← Line 1
TAKEOFF WEIGHT RESTRICTED/ ← Line 2

RMPF **6-N** **Ramp Fuel**

This keyword is used to specify to the Flight Planning system the Total Fuel on Board before engine start-up. Not specifying this keyword will force the system to calculate the required Total Fuel based other keywords provided (i.e.: **PYLD**, **ADF**, etc).

Example:	/RMPF 300/	(set Fuel on Board to 30,000)
	/RMPF/	(let system calculate FOB)

RSVFUEL **6-N** **Reserve Fuel**

This keyword is used to specify a Fixed Reserve Fuel.

Example:	/RSVFUEL 10/	(set Reserve Fuel to 1,000)
	/ RSVFUEL /	(set Reserve Fuel to NONE)

RSVTYP **3-N** **Reserve Policy Type**

This keyword is used to override the default Reserve Policy, if defined, for the Aircraft (**ACFT**), or for the Airline (**APF**).

Please refer to Appendix A for a list of available Reserve / Hold policies.

Example:	/RSVTYP 43/	(use Policy 43)
	/ RSVTYP/	(let system use default policy)
	/ RSVTYP 999/	(User Defined Reserve/Hold)

RTE **3-AN** **Route Number / Analysis Number**

Default is "01". This keyword is used to select a different route structure. This route must be defined in the Route Database. Currently, the system only supports a maximum of 99 routes for a given city-pair. Since the system will perform a Route Analysis on all the pre-built routes for the City-Pair and sorts them in order of flying time (Analysis Route 01 is the shortest flying time), to explicitly request the pre-built route in the Route Database, prefix the route number with an "R" (i.e.: R03). If no routes are defined for the ORIG-DEST City-Pair, the system will automatically create a Random Route and save it as RTE 01 (MTTA route structure).

Note: If no routes are defined for ORIG-ORIG City-Pair, the system will NOT automatically create a route. Use the **VIA** or **RTEMAN** keywords, or contact Skyplan to have the route added to the Route database.

Example:	/RTE 02/	(use 2nd best route)
	/RTE A02/	(same as RTE 02)
	/RTE R01/	(use pre-built fixed route 01)
	/RTE MTT/	(use MinTimeTrack route)
	/RTE DCT/	(use Direct route)

RTECRZ **2-N** **Route Analysis Cruise Speed**

This keyword specifies a fixed Mach value to be used during the Route Analysis. If omitted, the Route Analysis will assume the fixed Mach specified by the /CRZ / keyword. If this cruise setting is not a fixed speed, the Route Analysis will use the default fixed Mach setting for the aircraft type.

Example:	/RTECRZ 80/	(Mach .80)

RTEDTL **1-A** **Route Analysis Listing**

Default is "N". This keyword is used to request the Route Analysis output that the system creates when a new flight is requested. This is useful when many routes are available for a given city-pair.

Use the "S" option to suppress the generation and print of the flight plan. You will only be provided with the Route Analysis.

Example:	/RTEDTL Y/	(include the Route Analysis)
	/RTEDTL N/	(default - do not include)
	/RTEDTL S/	(suppress Flight Plan)

RTEMAN **AN** **Manual Route String**

This keyword is used to request a user specified Route via one or more waypoints/airways. The route string is made up of one or more of the following components:

- SID: Standard Departure Procedure

  Syntax: SID-sidname.sidwpt
  Example: SID-YYC9.HUSAR

  Note: Cannot use SID and ENTRY together in the same RTEMAN string.

- ENTRY: Track Entry Route (Orig to entrywpt)

  Syntax: ENT-entryname.entrywpt
  Example: ENT-N97B.CYMON

  Notes: 1. Entry Route may also contain a SID.
  2. Cannot use ENTRY and SID together in the same RTEMAN string.

- WAYPOINT:

  Syntax: waypoint-country-type
  Example: HUSAR
  YMS-CY
  LAO-RP-V

  Note: If the waypoint you wish to use cannot be automatically resolved by the system, you must provide the country code and possibly the type of waypoint when specifying the waypoint name. This occurs if a waypoint of the same name appears in more than one country, or there is a VOR and an NDB waypoint by the same name.

  Valid Waypoint Types are:

  - V: VOR Waypoint
  - N: NDB Waypoint
  - E: Enroute Waypoint

- RADIAL WAYPOINT:

  Syntax: waypoint
  Example: YQF240

- RADIALDME WAYPOINT:

Syntax: waypoint
Example: YQF240035

- AIRWAY:

  Syntax: airway
  Example: J504
  MTTA (Random Route – Via Airways)
  MTT (Minimum Time Track – Lat/Long)
  DCT (Direct Connection)

- AIRWAY Connection:

  Syntax: waypoint.airway.waypoint
  Example: HUSAR.J504.YEA.J504.VLN-CY.J504.YDR
  HUSAR.J504.YDR
  HUSAR.MTTA.SSM-CY

- DIRECT Connection:

  Syntax: waypoint..waypoint
  Example: YDR..VBI
  YDR.DCT.VBI

- TRACK: Track Structure

  Syntax: TRK-trackstruct-trackname
  entrywpt.TRK-trackstruct-trackname.exitwpt
  Example: TRK-NAT-Y
  CYMON.TRK-NAT-Y.GAPLI

  Notes: 1. If you only specify a Track in the RTEMAN string, the system will generate a MTTA route from Origin to the entrywpt, and a MTTA route from exitwpt to Destination.
  2. TRACK is normally used in conjunction with an ENTRY and EXIT.

- EXIT: Track Exit Route (exitwpt to Dest)

  Syntax: exitwpt.XIT-exitname
  Example: GAPLI.XIT-GAPLHR

  Notes: 1. Exit Route may also contain a STAR.
  2. Cannot use EXIT and STAR together in the same RTEMAN string.

- STAR: Standard Arrival Procedure

  Syntax: starwpt.STR-starname
  Example: YSM-CY.STR-MANS2

Note: Cannot use STAR and EXIT together in the same RTEMAN string.

Note: If you have a requirement to use the same RTEMAN route for a given Citypair routing in future flights, we recommend this routing be added to your Route Database. This will speed up the processing of subsequent flight plan requests for this Citypair.

Example:

/ RTEMAN ENT-N97B.CYMON.MTTA.HON-EG/
/ RTEMAN HUSAR.J504.YDR.MTTA/
/ RTEMAN TRK-NAT-Y/
/ RTEMAN ENT-N51B.YYT.TRK-NAT-Y.GIPER.XIT-GIPLHR/

/ RTEMAN YCF.MTTA.YYT.TRK-NAT-Y.GIPER.MTTA.SAM-EG/

/ RTEMAN SID-YYC9.HUSAR.J504.YEA.J504.VLN-CY.J504.YDR..VBI.J500.YQT.J500.SSM-CY.J5
31.APNEL.J531.YVV.J531.YMS-CY.STR-MANS2/

/RTEMAN HUSAR.J504.YEA.MTT.YVV.J531.YMS-CY/
/RTEMAN MTTA.YQT.J500.SSM-CY.MTTA/

RTEMEA **1-A** **Route Altitude Compliance Check**

Default is “N” (No check). This keyword is used to enable the Altitude Compliance Check feature. Input must be “Y” to check using MEA, “R” to check using MORA, or “C” to check using MOCA.

Example: /RTEMEA Y/ (use MEA)

RTETRK **4-A** **Track Routes Listing**

Default is "None". This keyword is used to request a listing of the Track Routes for a specified Track Structure. This is useful when flying through airspace that requires tracks (such as the North Atlantic).

Example: /RTETRK NAT/ (list All Tracks)
/RTETRK NATE/ (list only eastbound Tracks)
/RTETRK NATW/ (list only westbound Tracks)

RTEXFIR **4-A** **FIRs to Avoid (1-3 FIRs)**

Default is "None". This keyword is used to request a Route which avoids a list of FIRs (max 3). If a Fixed Route is requested (ie: RTE R01), the system will perform a compliance check and report any FIRs which the route overflies. If a Random Route is requested (MTTA), the system will attempt to generate a route which avoids the requested FIRs.

Note: FIR avoidance will make a best effort to route around the specified FIR(s), but complete avoidance of the FIR(s) is not guaranteed.

Example: /RTEXFIR CZWG/ (Avoid CZWG FIR)

TALTN **4-AN** **Take-off Alternate**

Default is None. This keyword is used to specify the designator in ICAO/IATA or FAA format for the appropriate Take-Off Alternate Airport. This airport cannot be more than 500 nautical miles (for 2 engine aircraft) or 1000 nautical miles (for 3 or more engine aircraft).

Example:	/TALTN YVR/	(specify T/O Alternate Airport)
	/TALTN/	(do not use a T/O Alternate)

TKF **6-AN** **Tankerage Fuel**

Default in "0". This keyword is used to specify the amount of fuel to be tankered. Use the "MAX" option to let the system calculate the maximum amount of fuel that can be tankered.

Example:	/TKF 100/	(set TKF to 10000 Lbs.)
	/TKF MAX/	(Max Tankerage calculation)
	/TKF/	(set TKF to 0)

TXTM **2-N** **Taxi Time at Origin**

Default as specified in the Airport Database. This keyword is used to override the Taxi Time (in minutes). The time value cannot exceed 60 minutes.

Example: /TXTM 10/

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VIA **AN** **Route VIA Waypoint**

This keyword is used to request a Random Route via one or more waypoints. The route between each specified waypoint will be a Random Route computed by the system. If the waypoint you wish to use is not a unique waypoint, you must provide the country code and possibly the type of waypoint when specifying the waypoint name. This occurs if a waypoint of the same name appears in more than one country, or there is a VOR and an NDB waypoint by the same name.

Valid Waypoint Types are:

- V: VOR Waypoint
- N: NDB Waypoint
- E: Enroute Waypoint

Note: Each Flight Plan request which uses the VIA keyword causes the system to recompute the Random Route with the requested VIA waypoints. If you have a requirement to use the same VIA waypoint(s) for a given Citypair routing in future flights, we recommend this routing be added to your Route Database. This will speed up the processing of subsequent flight plan requests for this Citypair.

Example:

/VIA DAGTY/	(Unique Waypoint)
/VIA YBR-CY/	(Waypoint in Country CY)
/VIA LAO-RP-V/	(VOR Wypnt in Country RP)
/VIA DAGTY YBR-CY/	(Use 2 VIA Waypoints)
/VIA 33N110W/	(Use a Lat/Long Coordinate)

WNDSRC **3-AN** **Wind Model**

Default is Current Wind Model. This keyword is used to specify the Wind Model to be use when computing the Flightplan. The following are the valid Wind Models:

- **AVN:** Aviation Digital Format
- **BRK:** UKMO Winds (Bracknell)
- **Mnn:** Average Monthly Winds (Jan=M01, …, Dec=M12)
- **Qnn:** Average Quarterly Winds (Q01-Q04)
- **ANL:** Average Annual Winds

Note: Historical (or Average) Wind Models can only be used when requesting a Test Plan (FLTNO=TEST).

Example:

/WNDSRC AVN/	(use the AVN model)
/WNDSRC M03/	(use the March Wind Model)
/WNDSRC/	(use default Wind Model)

WXBR **8-AN** **Weather Briefing**

Default is WX briefing Type "1". This keyword is used to request one or more weather briefings with the Flight Plan (to a maximum of 6 briefings). Standard Weather information will be provided for:

Standard Weather Briefings cover:

- Originating Airport
- Take-off Alternate Airport (if specified)
- Destination Airport
- Destination Alternate Airport(s)
- En-route Airport(s) (if specified)
- Reclear Destination/Alternate Airports (if specified)

The following standard WX Briefings are available:

a) SA/FT for all stations
b) SA/FT for all stations
NOTAMs for Orig/Dest/Altn/Enrt/Reclear Dest-Altn
c) SA/FT/FD for all stations
d) SA/FT/FD for all stations
NOTAMs for Orig/Dest/Altn/Enrt/Reclear Dest-Altn
e) SA/FT for all stations
NOTAMs for Dest/Altn/Enroute/Reclear Dest-Altn
f) SA/FT for all stations
NOTAMs for Orig/Altn/Enroute/Reclear Dest-Altn
g) SA/FC/FT for all stations
h) SA/FC/FT for all stations
NOTAMs for Orig/Dest/Altn/Enrt/Reclear Dest-Altn

A weather briefing can also be a customized customer briefing. Contact Skyplan to have your custom weather briefing created and saved.

Example:

/WXBR BRIEF1/	(use customer WX Briefing)
/WXBR 2/	(use standard WX Briefing 2)
/WXBR 1 BRIEF2/	(Produce both standard and customer WX Briefings)

ZFW **7-AN** **Zero Fuel Weight**

Default is "0". This keyword is used to specify the Zero Fuel Weight of the aircraft including payload. The system will calculate the Payload from the Aircraft's Empty Operating Weight. Use the "MAX" option to let the system calculate the Maximum Payload to be carried. Total payload cannot exceed the Empty Zero Fuel Weight (EZFW) of the aircraft.

Example:	/ZFW 80000/	(set OEW to 80000 Lbs.)
	/ZFW MAX/	(Max Payload calculation)
	/ZFW/	(set Payload to 0)

5. Appendix A – Reserve Policy Types

Overview

This section describes all the Reserve / Hold policy types that are available when requesting a computer generated optimized Flight Plan (using the **RSVTYP** keyword).

Each policy is described using the following convention:

"Reserve Fuel", "Hold Fuel"

Note: The Hold Fuel is assumed to be 30 minutes (if not specified in the description).

Definitions

Policy	Description
0	10% OF TRIP TIME AT TOD FUEL FLOW FOR JETS OR 15% OF TRIP TIME PLUS ALTERNATE TIME FOR PROP, 30 MINUTES HOLD (EX US)
1	45 MINUTES AT TOD FUEL FLOW, 30 MINUTES HOLD (EX US)
2	5% OF CRUISE (TOC->TOD) FUEL BURN (EX US)
3	GREATER OF (5% CRZ FUEL BURN) OR (HALF OF HOLD)
4	OPTION 02 IF RECLEAR, 03 OTHERWISE
5	5% OF TOTAL TIME AT TOD FUEL FLOW, 30 MINUTES HOLD
6	3% OF CRUISE BURN (TOC TO TOD)
7	2% OF CRUISE BURN (TOC TO TOD)
8	NO RESERVES, 30 MINUTES HOLD
9	2% OF TOTAL BURN
10	3% OF TOTAL BURN
11	5% OF TOTAL BURN, 30 MINUTES HOLD (EX US)
12	GREATER OF (5% TOTAL BURN) OR (900 KGS)
13	GREATER OF (5% TOTAL BURN) OR (1300 KGS)
14	GREATER OF (10% TRIP TIME AT TOD FUEL FLOW) OR (4500 KGS)
15	8000 LBS RESERVE, 30 MINUTES HOLD
16	4% OF TOTAL BURN, 30 MINUTES HOLD
17	GREATER OF (5% TOTAL BURN) OR (15 MIN AT TOD FUEL FLOW)
18	30 MINUTES AT TOD FUEL FLOW, 30 MINUTES HOLD (EX US)
19	ALTFUEL * (1 + ((ALTTIME*-0.814)+90) / 100)
20	GREATER OF (6% TOTAL BURN) OR (6300 LBS)
21	10% OF TOTAL BURN
22	10 MINUTES OF HOLD AT ELW
23	GREATER OF (5% TOTAL BURN) OR (10 MIN AT TOD FUEL FLOW)
24	1200 KGS RESERVE, 45 OR 130 (ISLD) MINUTES HOLD
25	1000 KGS RESERVE, 45 OR 130 (ISLD) MINUTES HOLD
26	*** DO NOT USE ***
27	7% OF CRUISE BURN (TOC->TOD)
28	8% OF CRUISE BURN (TOC->TOD)
29	*** DO NOT USE ***
30	GREATER OF (5% TOTAL BURN) OR (1000 LBS)
31	GREATER OF (5% OF CRUISE (TOC->TOD)) OR (1000 LBS)
32	LESSER OF (15% ROUTE TIME + 15% ALTN TIME) OR (60 MINUTES)
33	6% OF TOTAL BURN

Policy	Description
34	NO RESERVES, 45 MINUTES OF HOLD (1600 LBS)
35	GREATER OF (10% OF TRIP TIME AT TOD FUEL FLOW) OR (15 MINUTES)
36	*** DO NOT USE ***
37	15 MINUTES AT TOD FUEL FLOW, 30 MINUTES HOLD (EX US)
38	GREATER OF (5% RECLEAR BURN) OR (200 KGS) IF RECLEAR, 17 OTHERWISE
39	GREATER OF (45 MINUTES AT TOD FUEL FLOW) OR (750 LBS), NO HOLD
40	GREATER OF (45 MINUTES AT TOD FUEL FLOW) OR (1300 LBS), NO HOLD
41	GREATER OF (45 MINUTES AT TOD FUEL FLOW) OR (2200 LBS), NO HOLD
42	5% OF TOTAL BURN + 5% OF ALTERNATE BURN
43	NO RESERVES, NO HOLD
44	45 MINUTES AT TOD FUEL FLOW, NO HOLD
45	750 LBS, NO HOLD
46	8000 KGS RESERVE, 30 MINUTES HOLD
47	10000 KGS RESERVE, 30 MINUTES HOLD
48	GREATER OF (5% OF TOTAL BURN) OR (200 KGS)
49	GREATER OF (5% OF TOTAL BURN) OR (300 KGS)
50	GREATER OF (5% OF TOTAL BURN) OR (500 KGS)
51	GREATER OF (10% TOTAL BURN) OR (18 MIN AT TOD FUEL FLOW), 30 MINUTES HOLD
52	30 MINUTES AT TOD FUEL FLOW, NO HOLD
53	GREATER OF (5% TOTAL BURN) OR (15 MIN AT TOD FUEL FLOW), 45 MINUTES HOLD
54	NO RESERVES, 35 MINUTES HOLD
55	4000 LBS RESERVE, NO HOLD
56	6500 LBS RESERVE, NO HOLD
57	GREATER OF (5% TOT BURN + 5% ALTN BURN) OR (15 MINS AT TOD), 30 MINUTES HOLD
58	GREATER OF (5% TOT BURN + 5% ALTN BURN) OR (15 MINS AT TOD), 45 MINUTES HOLD
59	45 MINUTES OF HOLD (900 LBS) / RESERVE 5% OF TOTAL BURN
60	5% OF TOTAL BURN / GREATER OF (5% OF RCLPNT-DEST BURN) OR (220 KGS) ON RECLEAR
61	10% OF TOTAL BURN, 30 MINUTES HOLD + 15 MINUTES CONTINGENCY HOLD
62	10% OF TRIP TIME AT TOD FUEL FLOW, NO HOLD
63	GREATER OF (5% TOTAL BURN) OR (15 MIN AT TOD FUEL FLOW), 30 MINUTES HOLD
64	10% OF TOTAL BURN, 45 MINUTES HOLD (2150 KGS)
65	700 LBS RESERVE, NO HOLD
66	650 LBS RESERVE, NO HOLD
67	625 LBS RESERVE, NO HOLD
68	GREATER OF (30 MINUTES AT TOD FUEL FLOW) OR (750 LBS), NO HOLD
69	1500 LBS RESERVE, 30 MINUTES HOLD
70	2000 LBS RESERVE, 30 MINUTES HOLD
71	1500 KGS RESERVE, 30 MINUTES HOLD
72	2500 KGS RESERVE, 30 MINUTES HOLD
73	3% OF TOTAL BURN, 45 MINUTES HOLD
74	6% OF TOTAL BURN, 45 MINUTES HOLD
75	LESSER OF (15% ROUTE TIME + 15% ALTN TIME) OR (90 MINUTES AT TOD)
76	5% OF TOTAL BURN, 45 MINUTES HOLD
77	GREATER OF (5% ALTERNATE BURN) OR (100 LBS), 45 MINUTES HOLD
78	10% OF TRIP TIME AT TOD FUEL FLOW, 15 MINUTES HOLD
79	10% OF TOTAL BURN, 45 MINUTES HOLD
80	135 LBS RESERVE (8 MINUTES), 45 MINUTES HOLD
81	160 LBS RESERVE (8 MINUTES), 45 MINUTES HOLD
82	900 LBS RESERVE, NO HOLD

Policy	Description
83	6% OF TOTAL BURN, 45 MINUTES HOLD (30 MINUTES + 500 KGS)
84	6% OF TOTAL BURN, 30 MINUTES HOLD + 15 MINUTES CONTINGENCY HOLD
85	6% OF TOTAL BURN, 45 MINUTES HOLD (2150 KGS)
86	NO RESERVES, 45 MINUTES HOLD
87	GREATER OF (5% TOTAL BURN) OR (450 LBS), 45 MINUTES HOLD
88	1800 LBS RESERVE, NO HOLD
89	2200 LBS RESERVE, 30 MINUTES HOLD
90	675 LBS (45 MINUTES), NO HOLD
91	400 LBS RESERVE, 45 MINUTES HOLD
92	GREATER OF (6% TOTAL BURN) OR (500 KGS), 30 MINUTES HOLD
93	GREATER OF (6% TOTAL BURN) OR (300 KGS), 30 MINUTES HOLD
94	6% OF TOTAL BURN, 30 MINUTES HOLD + 60 MINUTES CONTINGENCY HOLD
95	320 LBS RESERVE, 45 MINUTES HOLD
96	2000 LBS RESERVE, NO HOLD
97	4000 LBS RESERVE, 15 MINUTES HOLD
98	2000 LBS RESERVE, 15 MINUTES HOLD
99	45 MINUTES AT TOD FUEL FLOW, 30 MINUTES HOLD
100	3000 LBS RESERVE, NO HOLD
101	1500 LBS RESERVE, NO HOLD
102	1000 LBS RESERVE, NO HOLD
103	3000 LBS RESERVE, 45 MINUTES HOLD
104	6000 LBS RESERVE, 15 MINUTES HOLD
105	GREATER OF (5% OF CRUISE BURN) OR (5 MINS OF HOLD AT ELW), 30 MINUTES HOLD
106	GREATER OF (5% OF CRUISE BURN) OR (5 MINS OF HOLD AT ELW), 45 MINUTES HOLD
107	30 MINUTES AT TOD FUEL FLOW, 15 MINUTES HOLD
108	100 LBS RESERVE, 45 MINUTES HOLD
109	600 LBS RESERVE, 25 MINUTES HOLD
110	2700 LBS RESERVE, 45 MINUTES HOLD
111	NO RESERVES, 15 MINUTES HOLD
112	NO RESERVES, 60 MINUTES HOLD
113	3000 LBS RESERVE, 30 MINUTES HOLD
114	3500 LBS RESERVE, 30 MINUTES HOLD
115	30 MIN TOD FUEL FLOW + 5% TOTAL BURN, GREATER OF (15 MIN OR 100 KGS) HOLD
116	60 MINUTES AT TOD FUEL FLOW, NO HOLD
117	5000 LBS RESERVE, NO HOLD
118	6000 LBS RESERVE, NO HOLD
119	8000 LBS RESERVE, NO HOLD
120	2500 LBS RESERVE, NO HOLD
121	2500 LBS RESERVE, 30 MINUTES HOLD
122	4500 LBS RESERVE, NO HOLD
123	75 MINUTES AT TOD FUEL FLOW, NO HOLD
124	600 LBS RESERVE, NO HOLD
125	10000 LBS RESERVE, NO HOLD
126	1750 LBS RESERVE, NO HOLD
127	1200 LBS RESERVE, 45 MINUTES HOLD
128	1200 LBS RESERVE, NO HOLD
129	800 LBS RESERVE, NO HOLD
130	30 MINUTES AT TOD FUEL FLOW, 30 MINUTES HOLD
131	90 MINUTES AT TOD FUEL FLOW, NO HOLD
132	5500 LBS RESERVE, 45 MINUTES HOLD
133	5% OF TOTAL TIME AT TOD FUEL FLOW, 15 MINUTES HOLD
134	3500 LBS RESERVE, NO HOLD

Policy	Description
135	2200 LBS RESERVE, NO HOLD
136	3000 LBS RESERVE, 20 MINUTES HOLD
137	2000 LBS RESERVE, 45 MINUTES HOLD
138	100 MINUTES AT TOD FUEL FLOW, NO HOLD
139	GREATER OF (45 MINUTES AT TOD FUEL FLOW) OR (1500 LBS), NO HOLD
140	25000 LBS RESERVE, 30 MINUTES HOLD
141	2000 KGS (45 MINUTES), NO HOLD
142	2000 KGS RESERVE, 30 MINUTES HOLD
143	900 KGS RESERVE, 30 MINUTES HOLD
144	1% OF TOTAL BURN, 30 MINUTES HOLD
145	1% OF TOTAL BURN, NO HOLD
146	6600 LBS RESERVE, 30 MINUTES HOLD
147	8800 LBS RESERVE, 30 MINUTES HOLD
148	3000 KGS RESERVE, 30 MINUTES HOLD
149	4000 KGS RESERVE, 30 MINUTES HOLD
150	400 LBS RESERVE (5 MINUTES), 30 MINUTES HOLD
151	1600 LBS RESERVE, NO HOLD
152	375 KGS RESERVE, 30 MINUTES HOLD
153	500 KGS RESERVE, 30 MINUTES HOLD
154	1000 KGS RESERVE, 30 MINUTES HOLD
155	25 MINUTES AT TOD FUEL FLOW, 45 MINUTES HOLD
156	4000 LBS RESERVE, 30 MINUTES HOLD
157	5% OF TOTAL BURN, 30 MINUTES HOLD
158	1500 LBS RESERVE, 15 MINUTES HOLD
159	45 MINUTES AT TOD FUEL FLOW, 15 MINUTES HOLD
160	5% OF TOTAL BURN, NO HOLD
161	45 MINUTES AT TOD FUEL FLOW, 45 MINUTES HOLD
162	MAX(5% TOTAL BURN, 5 MINS HOLD AT ELW, 175 LBS), MAX(30 MIN, 600 LBS) HOLD
163	800 LBS RESERVE, 30 MINUTES HOLD
164	1000 LBS RESERVE, 30 MINUTES HOLD
165	5% OF TOTAL BURN, 60 MINUTES HOLD
166	15 MINUTES AT TOD FUEL FLOW, NO HOLD
167	15 MINUTES AT TOD FUEL FLOW, 15 MINUTES HOLD
168	15 MINUTES AT TOD FUEL FLOW, 30 MINUTES HOLD
169	15 MINUTES AT TOD FUEL FLOW, 45 MINUTES HOLD
170	15 MINUTES AT TOD FUEL FLOW, 60 MINUTES HOLD
171	30 MINUTES AT TOD FUEL FLOW, 45 MINUTES HOLD
172	30 MINUTES AT TOD FUEL FLOW, 60 MINUTES HOLD
173	45 MINUTES AT TOD FUEL FLOW, 60 MINUTES HOLD
174	60 MINUTES AT TOD FUEL FLOW, 15 MINUTES HOLD
175	60 MINUTES AT TOD FUEL FLOW, 30 MINUTES HOLD
176	60 MINUTES AT TOD FUEL FLOW, 45 MINUTES HOLD
177	60 MINUTES AT TOD FUEL FLOW, 60 MINUTES HOLD
178	LESSER OF MAX(5% TOTAL BURN, 1600 KGS) OR (4000 KGS), 30 MINUTES HOLD
179	NO RESERVES, 20 MINUTES HOLD
180	1800 LBS RESERVE, 45 MINUTES HOLD
181	NO RESERVES, 20 MINUTES HOLD (450 LBS)
182	NO RESERVES, 30 MINUTES HOLD (675 LBS)
183	NO RESERVES, 45 MINUTES HOLD (1013 LBS)
184	6% OF TOTAL BURN, 30 MINUTES HOLD, PLUS 600 KGS ADDITIONAL
185	6% OF TOTAL BURN, 30 MINUTES HOLD, PLUS 1100 LBS ADDITIONAL
186	LESSER OF (5% TOTAL BURN + 5% ALTN BURN) OR (1500 LBS), 30 MINUTES HOLD

Policy	Description
187	LESSER OF MAX(5% TOTAL BURN, 1600 KGS) OR (3500 KGS), 30 MINUTES HOLD
188	250 KGS RESERVE, 30 MINUTES HOLD
189	GREATER OF (5% OF TOTAL BURN) OR (5 MINUTES HOLD), 30 MINUTES HOLD
190	1100 LBS RESERVE, 30 MINUTES HOLD
191	45 MINUTES AT TOD FUEL FLOW, 15 MINUTES HOLD @ FL180
192	GREATER OF (5% OF TOTAL BURN) OR (50 LBS, 5 MINUTES), 30 MINUTES HOLD
193	158 KGS RESERVE (5 MINUTES), 30 MINUTES HOLD
194	450 KGS RESERVE (5 MINUTES), 30 MINUTES HOLD
195	600 KGS RESERVE, 30 MINUTES HOLD
196	300 LBS RESERVE, 30 MINUTES HOLD
197	300 KGS RESERVE, 30 MINUTES HOLD
198	5% OF TOTAL BURN, MAX(30 MIN, 800 LBS) HOLD
199	5% OF TOTAL BURN, MAX(30 MIN, 900 LBS) HOLD
200	45 MINUTES AT TOD FUEL FLOW, 20 MINUTES HOLD
201	10% OF TOTAL BURN, 20 MINUTES HOLD
202	700 LBS RESERVE, 15 MINUTES HOLD
203	5% TOTAL BURN (300 KGS MINIMUM, 500 KGS MAXIMUM), 30 MINUTES HOLD
204	5% TOTAL BURN (300 KGS MINIMUM, 600 KGS MAXIMUM), 30 MINUTES HOLD
205	5% TOTAL BURN (400 KGS MINIMUM, 600 KGS MAXIMUM), 30 MINUTES HOLD
206	1200 LBS RESERVE, 30 MINUTES HOLD (500 LBS)
207	1250 LBS RESERVE, NO HOLD
208	GREATER OF (5% OF TOTAL BURN) OR (400 KGS)
209	1050 LBS RESERVE, NO HOLD
210	GREATER OF (5% OF TOTAL BURN) OR (5 MINS OF HOLD AT ELW), 30 MINUTES HOLD
211	5% OF TOTAL TIME AT TOD FUEL FLOW, 30 MINUTES HOLD
212	GREATER OF (5% OF TOTAL BURN) OR (60 KGS), 30 MINUTES HOLD
213	900 LBS RESERVE, 30 MINUTES HOLD
214	5% OF CRUISE (TOC->TOD) FUEL BURN, 30 MINUTES HOLD
215	MAX (5% TOTAL BURN, 5 MINS HOLD, OR 100 LBS), MAX (30 MIN OR 600 LBS) HOLD
216	10% OF TOTAL BURN + 10% OF ALTERNATE BURN, 30 MINS HOLD
217	GREATER OF (5% OF TOTAL BURN) OR (5 MINS OF HOLD AT ELW), 45 MINUTES HOLD
218	10% OF TRIP TIME AT TOD FUEL FLOW, 30 MINUTES HOLD
219	5% TOTAL BURN (500 KG MINIMUM, 700 KG MAXIMUM), 30 MINUTES HOLD
220	GREATER OF 5% TOTAL BURN OR 200 LBS (5 MINS), MAX (30 MIN, 900 LBS) HOLD
221	GREATER OF 3% TOTAL BURN OR 200 LBS (5 MINS), MAX (30 MIN, 900 LBS) HOLD
222	5% OF TOTAL BURN, MAX(30 MIN, 1200 KGS) HOLD
223	2500 LBS RESERVE, 45 MINUTES HOLD
224	5% OF TOTAL BURN, 1900 LBS HOLD
225	5% OF TOTAL BURN, 1400 LBS HOLD