**Four Arrival**

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**TRANSITIONS**

- **BOSOM**
  - From BOSOM to ELSER: Via MLY R-272 inbound to D19 MLY, then turn LEFT via MLY 17 DME Arc and MLY R-297 inbound.

- **DATOM**
  - From DATOM to ELSER: Via MLY R-202 inbound to D19 MLY then turn LEFT via MLY 17 DME Arc and MLY R-297 inbound.

- **KEMBO**
  - From KEMBO to ELSER: Via MLY R-303 inbound to D25 MLY, then turn RIGHT via a 151° heading to MLY R-297/D21 then via MLY R-297 inbound.

- **KESPA**
  - From KESPA to ELSER: Via MLY R-287 inbound to D19 MLY, then turn LEFT via MLY 17 DME Arc and MLY R-297 inbound.

- **LIBEX**
  - From LIBEX to ELSER: Via MLY R-315 inbound to D19 MLY, then turn RIGHT via MLY 17 DME Arc and MLY R-297 inbound.

- **MANLEY**
  - From MLY to ELSER: Via MLY R-267 outbound to D15 MLY, then turn RIGHT via MLY 17 DME Arc and MLY R-297 inbound.

- **RADOK**
  - From RADOK to ELSER: Via MLY R-353 inbound to D20 MLY, then turn RIGHT via MLY 17 DME Arc and MLY R-297 inbound.

- **SAVEM**
  - From SAVEM to ELSER: Via MLY R-340 inbound to D20 MLY, then turn RIGHT via MLY 17 DME Arc and MLY R-297 inbound.

From ELSER to GUDIL via MLY R-297 inbound descending to ATC assigned altitude. Hold at GUDIL unless/until cleared for the VOR DME Rwy 12 approach procedure.

**CHANGES:**

- Chart reindexed.
- 4 MAY 07

**SPEED:**

- MAX 250 KT BELOW 10000'
CHANGES:

1. VOR/DME required.
2. DME Arcs are based on MLY.

ALT SET: hPa (IN on req)   Trans level: FL 180   Trans alt: 17000'
INITIAL CLIMB

Climb on MLY R-117 to or beyond D12 MLY. Then turn RIGHT to intercept and proceed via MLY R-155 inbound climbing to cross ALKOL at an altitude specified by ATC.
MKJP/KIN  
NORMAN MANLEY INTL  

Trans level: FL 180  
Trans alt: 17000’

1. SOUTHBOUND departure via ATS route A-301. 
2. VOR/DME required.

ALPEN ONE DEPARTURE

SPEED: MAX 250 KT BELOW 10000’

RWY | INITIAL CLimb |
--- | ----------------|
12  | Climb on runway heading to at or above 400’, then turn RIGHT. |
30  | ▶ Climb on MLY R-297 to cross 2000’ at or prior to GUDIL. Then turn LEFT. (If unable to cross GUDIL at 2000’, use maximum rate of climb direct to GUDIL then turn LEFT via 267° heading climbing to 2000’ within MLY 15 DME). |

ROUTING

Intercept and proceed via MLY R-170 to ALPEN.

CHANGES: New procedure at this airport.
On recognition of communication failure 7 minutes or less after take-off and in instrument meteorological conditions, proceed as follows:
1. Squawk 7600; and
2. **MAINTAIN** last assigned altitude and heading for 7 minutes after recognition of communication failure; then
3. Climb to **10000'** maintaining last assigned heading; then
4. Proceed direct to nearest Fix associated with filed flight plan route continuing climb to flight plan cruising level.

If in visual meteorological conditions, continue to fly in VMC and land at the nearest suitable aerodrome.

If communication failure occurs more than 7 minutes after take-off, comply with the appropriate procedures for communication failure and proceed according to the current flight plan route to destination airport, unless it is considered inadvisable.
DATOM ONE DEPARTURE

**SPEED:** MAX 250 KT BELOW 10000'

**INITIAL CLimb**

<table>
<thead>
<tr>
<th>RWY</th>
<th>INITIAL CLIMB</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Climb on runway heading to at or above 400’, then turn RIGHT.</td>
</tr>
<tr>
<td>30</td>
<td><strong>A</strong> Climb on MLY R-297 to cross 2000’ at or prior to GUDIL. Then turn LEFT. (If unable to cross GUDIL at 2000’, use maximum rate of climb direct to GUDIL then turn LEFT via 267° heading climbing to 2000’ within MLY 15 DME).</td>
</tr>
</tbody>
</table>

**ROUTING**

Intercept and proceed via MLY R-202 to DATOM.

**CHANGES:** Chart reindexed.

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KINGSTON CTA/MKJK FIR
HAVANA CTA/M
UFH FIR
CUBA (OUTER) ADIZ
QNE
QNH (17000' OR BELOW)

086°
094°

15
DME

CHANGES:
Apt Elev
10'

Trans level: FL180  Trans alt: 17000'
1. EASTBOUND departures via ATS routes B-520, G-633, direct NORTHEAST
KINGSTON FIR boundary.
2. VOR/DME required.

ENEKA FIVE DEPARTURE
SPEED: MAX 250 KT BELOW 10000'

INITIAL CLIMB
Climb on MLY R-117 to at or above 32000' or ENEKA, whichever is earlier.
Climb on MLY R-117 to at or before GUDIL, turn LEFT via 110° heading climbing to at or above
90000', whichever is first.
(If unable to cross at or before GUDIL, use maximum rate of climb direct
to GUDIL then turn LEFT and proceed via 267° heading climbing to at or above
90000' within MLY 15 DME).

ROUTING
Turn LEFT to intercept assigned route.

CHANGES: Chart reindexed, MSA depiction.
CHANGES:


2. VOR/DME required.

MKJP/KIN
NORMAN MANLEY INTL
9 Mar 07

INITIAL CLIMB

Climb on the MLY R-297 to GUDIL and intercept assigned route.

- If unable to cross GUDIL at 2800' request climb on the B-520 WESTBOUND to 5000', then request to intercept assigned route.
On recognition of communication failure 7 minutes or less after take-off and in instrument meteorological conditions, proceed as follows:

1. Squawk 7600; and
2. **MAINTAIN** last assigned altitude and heading for 7 minutes after recognition of communication failure; then
3. Climb to 10000’ maintaining last assigned heading; then
4. Proceed direct to nearest Fix associated with filed flight plan route continuing climb to flight plan cruising level.

If in visual meteorological conditions, continue to fly in VMC and land at the nearest suitable aerodrome.

If communication failure occurs more than 7 minutes after take-off, comply with the appropriate procedures for communication failure and proceed according to the current flight plan route to destination airport, unless it is considered inadvisable.

**INITIAL CLIMB**

Proceed on track 300° to KEYNO (MLY R-300/D17), climbing to altitude assigned by ATC. ATC will provide RADAR vectors to intercept filed/assigned ATS routes, before reaching KEYNO.

CHANGES: New procedure at this airport.
LEXUV TWO RNAV DEPARTURE (LEXUV2.LEXUV) (Rwy 12)

**SPEEDS:** MAX 220 KT UNTIL PEMPE

This SID requires take-off minimums
(for standard minimums, refer to airport chart):
Standard.

### INITIAL CLIMB

<table>
<thead>
<tr>
<th>TRANSITIONS</th>
<th>ALTITUDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>KEMBO</td>
<td>Turn RIGHT direct KEMBO, then as filed.</td>
</tr>
<tr>
<td>RADOK</td>
<td>Turn RIGHT direct RADOK, then as filed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INITIAL CLIMB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proceed via 117° course to UKIMO, then turn RIGHT direct PEMPE, then turn RIGHT direct LEXUV.</td>
</tr>
<tr>
<td>Climb to assigned altitude.</td>
</tr>
</tbody>
</table>

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Apt Elev
10'

Trans level: FL180  Trans alt: 17000'
2. VOR/DME required.

MANLEY FIVE DEPARTURE
(WRY 12)

SPEED: MAX 250 KT BELOW 10000'

2. VOR/DME required.

CHANGES: Chart reindexed, MSA depiction.
OMPAL ONE DEPARTURE

**SPEED:** MAX 250 KT BELOW 10000’

**INITIAL CLIMB**

<table>
<thead>
<tr>
<th>RWY</th>
<th>INITIAL CLIMB</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Climb on runway heading to at or above 400’, then turn RIGHT.</td>
</tr>
<tr>
<td>30</td>
<td>Climb on MLY R-297 to cross 2000’ at or prior to GUDIL. Then turn LEFT. (If unable to cross GUDIL at 2000’, use maximum rate of climb direct to GUDIL then turn LEFT via 267° heading climbing to 2000’ within MLY 15 DME).</td>
</tr>
</tbody>
</table>

**ROUTING**

Intercept and proceed via MLY R-151 to OMPAL.

**CHANGES:** Chart reindexed.
**CHANGES:** Chart reindexed, climb rates.

**RADOK FIVE DEPARTURE**

**SPEED:** MAX 250 KT BELOW 10000′

**D12 MLY**
- N18 00.3
- W076 58.3
  - CAT C, D, E
  - At or above 8000′

**D20 MLY**
- N18 15.5
- W076 51.0
  - At or above 8000′

**D30**

**MANLEY**
- 115.5 MLY
- N17 55.8
- W076 46.7
  - At or above 8000′

**GUDIL**
- N17 58.5
- W076 53.5
  - At or above 5500′

**ELSER**
- N18 01.5
- W076 01.3
  - CAT A, B
  - At or above 4100′

This SID requires minimum climb gradients of:
- Rwy 12: 5.1% (309.3′ per NM) to 7000′.
- Rwy 30 (CAT A, B): 4.96% (302′ per NM) to 4100′.
  - (CAT C, D, E): 6.2% (377.4′ per NM) to 4100′.

<table>
<thead>
<tr>
<th>Gnd speed-KT</th>
<th>75</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.96% V/V(fpm)</td>
<td>378</td>
<td>503</td>
<td>755</td>
<td>1007</td>
<td>1258</td>
<td>1510</td>
</tr>
<tr>
<td>5.1% V/V(fpm)</td>
<td>387</td>
<td>516</td>
<td>773</td>
<td>1031</td>
<td>1289</td>
<td>1547</td>
</tr>
<tr>
<td>6.2% V/V(fpm)</td>
<td>472</td>
<td>629</td>
<td>944</td>
<td>1258</td>
<td>1573</td>
<td>1887</td>
</tr>
</tbody>
</table>

**INITIAL CLIMB**

**Rwy 12**
- CAT A, B, C, D, E: Climb on MLY R-117 to D5 MLY, turn RIGHT to intercept and proceed via MLY R-160 inbound to MLY. Turn RIGHT and proceed via MLY R-353 to RADOK.

**Rwy 30 (CAT A, B)**
- Climb on MLY R-297 to ELSER, then turn RIGHT to intercept and proceed via MLY 17 DME Arc to intercept MLY R-353 to RADOK.
- CAT C, D, E: Climb on MLY R-297 to D12 MLY then turn RIGHT and proceed via 027° heading to intercept MLY R-353 to RADOK.

**Provision:** CAT A or B aircraft able to cross D12 MLY on MLY R-297 at or above 4000′ may turn RIGHT and proceed according to CAT C and D departure.
SAVEM FIVE DEPARTURE

**SPEED:** MAX 250 KT BELOW 10000'

This SID requires minimum climb gradients of:

- Rwy 12: 5.3% (324.3' per NM) to 7000'.
- Rwy 30 (CAT A, B): 4.96% (302' per NM) to 4100'.
- (CAT C, D, E): 6.2% (377.4' per NM) to 4000'.

### Initial Climb

**Cat A, B, C, D, E:** Climb on MLY R-117 to D5 MLY, turn RIGHT to intercept and proceed via MLY R-160 inbound to MLY. Turn RIGHT and proceed via MLY R-340 to SAVEM.

**Cat A, B:** Climb on MLY R-297 to ELSER, then turn RIGHT to intercept and proceed via MLY 17 DME Arc to intercept MLY R-340 to SAVEM.

**Cat C, D, E:** Climb on MLY R-297 to D12 MLY then turn RIGHT and proceed via MLY R-340 to SAVEM.

**Provision:** Cat A or B aircraft able to cross D12 MLY on MLY R-297 at or above 4000' may turn RIGHT and proceed according to Cat C and D departure.

**Provision:** Cat A or B aircraft able to cross D12 MLY on MLY R-297 at or above 4000' may turn RIGHT and proceed according to Cat C and D departure.

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**Provision:** Cat A or B aircraft able to cross D12 MLY on MLY R-297 at or above 4000' may turn RIGHT and proceed according to Cat C and D departure.
TIBEL ONE DEPARTURE

**SPEED:** MAX 250 KT BELOW 10000'

1. SOUTHBOUND departure via ATS route A-511. Then turn LEFT, then turn RIGHT.
2. VOR/DME required.

**INITIAL CLIMB**

Climb on runway heading to at or above 400'. Then turn RIGHT.

At or above 2000', use maximum rate of climb direct to GUDIL. Then turn LEFT, then turn LEFT via 267° heading climbing to 2000' within 15 DME.

**ROUTING**

Intercept and proceed via MLY R-119 to TIBEL.

**Rwy**

12

30

**Apt Elev**

10'

**Trans level:** FL180

**Trans alt:** 17000'

**MARKS:**

1. NORTHBOUND departure via ATS route A-511. Then turn LEFT, then turn LEFT.
2. VOR/DME required.

**INITIAL CLIMB**

Climb on runway heading to at or above 2000', then turn LEFT. If unable to cross GUDIL at 2000', use maximum rate of climb direct to GUDIL. Then turn LEFT via 267° heading climbing to 2000' within 15 DME.

**SPEED:**

MAX 250 KT BELOW 10000'

**MARKS:**

1. SOUTHBOUND departure via ATS route A-511. Then turn LEFT, then turn RIGHT.
2. VOR/DME required.

**INITIAL CLIMB**

Climb on runway heading to at or above 400'. Then turn RIGHT.

At or above 2000', use maximum rate of climb direct to GUDIL. Then turn LEFT, then turn LEFT via 267° heading climbing to 2000' within 15 DME.

**SPEED:**

MAX 250 KT BELOW 10000'

**MARKS:**

1. NORTHBOUND departure via ATS route A-511. Then turn LEFT, then turn LEFT.
2. VOR/DME required.
URMAN ONE DEPARTURE

**SPEED: MAX 250 KT BELOW 10000’**

1. SOUTHEASTBOUND departure via ATS route G-442.
2. VOR/DME required.

**INITIAL CLIMB**

- Climb on runway heading to at or above **400’**, then turn **RIGHT**.
- Climb on MLY R-297 to cross **2000’** at or prior to GUDIL. Then turn **LEFT**.
  - (If unable to cross GUDIL at **2000’**, use maximum rate of climb direct to GUDIL then turn **LEFT** via 267° heading climbing to **2000’** within MLY 15 DME).

**ROUTING**

Intercept and proceed via MLY R-135 to URMAN.

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TAXIWAY F is not standard and requires:
- Four-engined and/or low slung underwing engined aircraft to cut engines on West side of taxiway pending pavement improvements (FOD).

For engine start up requests and departure clearances pilots shall contact frequency 121.7.

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Flight over Port Royal 3 NM West not permitted below 1500'. Maneuver south of rwy centerline due to high terrain north.

When B747, B777 or A340 aircraft parked on Stand 5 or 6 rwy obstacle surface zone may be impinged upon by up to 18' (5.5m).

Parking gates/coordinates, inset.

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Parking gates/coordinates, inset.
Missed Approach: Climb to 1000'. Then turn RIGHT to 225° hdg to intercept 17.0 DME MLY VOR Arc at 4000' to KEYNO D17.0 MLY. Thence to SALOC D7.4 MLY and hold.

Ground: hPa (IN on req) Rwy Elev: 0 hPa Trans level: FL 180 Trans alt: 17000'

GS SALOC D2.9 MLY
278' (270°)

Max Kts

1.9 Km
2.3 Km
2.8 Km
3.2 Km

Ground frequency.
MISSED APCH: Climbing RIGHT turn to 4000’ direct MARAG and hold.

Alt Set: hPa (IN on req)  Rwy Elev: 0 hPa  Trans level: FL 180  Trans alt: 17000’
1. GPS or RNP-0.3 required.  2. DME/DME RNP-0.3 not authorized.

Not Authorized North of Extended Rwy Centerline
**MISSED APCH:** Climbing LEFT turn to 3000’ direct MARAG and hold.

Alt Set: hPa (IN on req)  Rwy Elev: 1 hPa  Trans level: FL 180  Trans alt 17000’
1. GPS or RNP-0.3 required.  2. DME/DME RNP-0.3 not authorized.

**GROUND FREQ:**

**MAP at RW30**

<table>
<thead>
<tr>
<th>Gnd speed-Kts</th>
<th>70</th>
<th>90</th>
<th>100</th>
<th>120</th>
<th>140</th>
<th>160</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descent angle</td>
<td>3.05°</td>
<td>378</td>
<td>486</td>
<td>540</td>
<td>648</td>
<td>755</td>
</tr>
</tbody>
</table>

**CIRCLE-TO-LAND**

Not Authorized North of Extended Rwy Centerline

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1050°</td>
<td>1050°</td>
<td>1150°</td>
<td>1050°</td>
</tr>
<tr>
<td>2.3 Km</td>
<td>2.8 Km</td>
<td>5.6 Km</td>
<td>2.3 Km</td>
</tr>
</tbody>
</table>

**CHANGES:**

- Ground frequency.
- DME/DME RNP-0.3 not authorized.
- GPS or RNP-0.3 required.

**MISSED APCH:** Pull up to MLY VOR then climbing RIGHT turn via 160° heading to 2000', thence climbing RIGHT turn via 260° heading to intercept MLY VOR 17 DME Arc at 4000' to ELSER D15.0 thence to hold at GUDIL D7.0.

1. Arrivals from East sector enter the holding pattern at or above 9500'.

**PANS OPS**

**CHANGES:** Ground frequency, descent gradient removed.