<table>
<thead>
<tr>
<th>Column</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Integral Launch</td>
<td>Dispose all Segments each Mission.</td>
</tr>
<tr>
<td>II</td>
<td>Integral Launch</td>
<td>Retrieve/Reuse R. E. V. each Mission - Dispose all other Segments.</td>
</tr>
<tr>
<td>VI</td>
<td>Rendezvous/Resupply</td>
<td>Retrieve/Reuse Integrated R. E. V. + Supply Module + Lab - Revisit/Reuse Mission Module Lab ~ 1 year cycle.</td>
</tr>
</tbody>
</table>
## Follow-on Systems Perspective

### Integral

<table>
<thead>
<tr>
<th>BASIC P/L</th>
<th>BASIC &amp; ADV. P/L</th>
<th>ADV. P/L OPS &amp; MULTI-MISSION</th>
<th>ADV. P/L OPS &amp; OTHER MISSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="Integral" alt="Diagram" /></td>
<td><img src="BasicAdv" alt="Diagram" /></td>
<td><img src="AdvOpsMultiMission" alt="Diagram" /></td>
<td><img src="AdvOpsOtherMissions" alt="Diagram" /></td>
</tr>
</tbody>
</table>

### System Availability

<table>
<thead>
<tr>
<th>Year</th>
<th>R. E. V. Type</th>
<th>Launch Veh.</th>
<th>Launch Weight</th>
<th>P/L Type</th>
<th>Mission Duration</th>
<th>Dev. 'Mt Status</th>
<th>R. E. V. Lab. Mod.</th>
<th>Miss. Mod.</th>
<th>Launch Vehicle</th>
<th>Dev. 'Mt Cycle</th>
<th>NRC - (ROM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>GEMINI B</td>
<td>T III M</td>
<td>31.0 K (i = 90°)</td>
<td>BASELINE 4&quot;</td>
<td>30 DAYS</td>
<td>PHASE II</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>5 YR</td>
<td>0</td>
</tr>
<tr>
<td>1973 - 1975</td>
<td>GEMINI B</td>
<td>T III M</td>
<td>30.0 K (i = 96.4°)</td>
<td>BASIC (4&quot;) &amp; ADV (2&quot;)</td>
<td>CONT. OPS - 1 YR.</td>
<td>PHASE II</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>3 YR (BASIC)</td>
<td>275 M$</td>
</tr>
<tr>
<td>1978</td>
<td>LIFTING BODY (MED L/D)</td>
<td>T III M</td>
<td>47.0 K (i = 96.4°)</td>
<td>ADV (2&quot;) &amp; MULT.</td>
<td>CONT. OPS - 1 YR.</td>
<td>TECHNOLOGY STUDIES COMPONENTS IN PHASE II PRELIMINARY STUDIES PRELIMINARY STUDIES</td>
<td>7 YR</td>
<td>1,200 M$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POST 1980</td>
<td>LIFTING BODY (HI L/D)</td>
<td>STRAP-ON TANK-AGE</td>
<td>~ 70.0 K</td>
<td>ADV (2&quot;) &amp; OTHER MISSIONS</td>
<td>PROPOSED BY INDUSTRY</td>
<td>10-12 YRS</td>
<td>2,000 M$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Initial Planning Period

- 1970: GEMINI B, T III M, 31.0 K (i = 90°), BASELINE 4" 30 DAYS
- 1973-1975: GEMINI B, T III M, 30.0 K (i = 96.4°), BASIC (4") & ADV (2"), BASELINE 4" CONT. OPS - 1 YR, 60 D. RESUPPLY (PACK), 50 D. RESUPPLY
- 1978: LIFTING BODY (MED L/D), T III M, 47.0 K (i = 96.4°), ADV (2") & MULT., CONT. OPS - 1 YR, TECHNOLOGY STUDIES COMPONENTS IN PHASE II PRELIMINARY STUDIES PRELIMINARY STUDIES
- POST 1980: LIFTING BODY (HI L/D), STRAP-ON TANK-AGE ~ 70.0 K, ADV (2") & OTHER MISSIONS

### Additional Notes

- RESUPPLY INTEGRAL ADV. P/L ADV. P/L ADV. P/L & MULTI-MISSION
- CONT. OPS - 1 YR.
- 50 D. RESUPPLY
- 60 D. RESUPPLY
- PROPOSED BY INDUSTRY
- 10-12 YRS
- 2,000 M$
EXTENDED DURATION INTEGRAL LAUNCH

ORBITING VEHICLE

(50 DAY MISSION DURATION)

(LDC 1 BOOSTER)
SELECTED EARLY FOLLOW-ON ALTERNATIVES

INTEGRAL LAUNCH OPERATIONS

- THI M
- 4" RES. P/L
- 30 DAY

EDAM

- THI M
- 4" RES. P/L
- 45 DAY

(BASELINE SYSTEMS)

(EXTENDED DURATION SYSTEMS)

- THI LDC 1
- 4" RES. P/L
- 90 DAY

- THI LDC 1 & 2
- 2" RES. ADV. P/L
- 60 DAY

RENDREVIOUS/RESUPPLY OPERATIONS

- THI M
- 4" RES. P/L
- 30 DAY

RRV

- THI M
- 4" RES. P/L
- CONT. OPS
- 60 DAY RESUPPLY

RRV

- THI M
- 2" RES. ADV. P/L
- CONT. OPS.
- 50 DAY RESUPPLY
SECRET SPECIAL HANDLING

RESUPPLY SYSTEM DERIVATION FROM MOL HARDWARE

BASELINE AM VEHICLE

BASELINE M/AM VEHICLE

RENEGAZOUS RESUPPLY VEHICLE

(RRV)

DRV + FILM HANDLING SYSTEM

EXTENDED DURATION MODULE

GEMINI B

LABORATORY UNPRESSURIZED COMPARTMENT

+ ADD BASELINE SUBSYSTEM COMPONENTS
+ ADD DOCKING SYSTEM AND INTERFACE

RENEGAZOUS INITIAL VEHICLE

(PIV)

+ ADD EXTENDED DURATION PROVISIONS
+ ADD DOCKING SYSTEM AND INTERFACE
+ ADD ASCENT FAIRING

DELETE GEMINI B