The following classification changes will be effected by this Notice of Changes:

<table>
<thead>
<tr>
<th>Action</th>
<th>Subclass</th>
<th>Group(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCHEME:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Titles Changed:</td>
<td>B64G</td>
<td>SUBCLASS</td>
</tr>
<tr>
<td></td>
<td>B64G</td>
<td>1/10, 1/1007, 1/1014, 1/16, 1/24, 1/40, 1/42, 1/44, 1/46, 1/48, 1/50, 1/52, 1/54, 1/56, 1/58, 1/66</td>
</tr>
<tr>
<td></td>
<td>B64G</td>
<td>3/00</td>
</tr>
<tr>
<td></td>
<td>B64G</td>
<td>7/00</td>
</tr>
<tr>
<td>Warnings Deleted:</td>
<td>B64G</td>
<td>SUBCLASS</td>
</tr>
<tr>
<td>DEFINITIONS:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definitions New:</td>
<td>B64G</td>
<td>1/1007, 1/44, 1/52</td>
</tr>
<tr>
<td>Definitions Modified:</td>
<td>B64G</td>
<td>SUBCLASS</td>
</tr>
<tr>
<td></td>
<td>B64G</td>
<td>1/10, 1/1014, 1/24, 1/40, 1/46, 1/48, 1/50, 1/54, 1/56, 1/58, 1/66</td>
</tr>
<tr>
<td></td>
<td>B64G</td>
<td>3/00</td>
</tr>
<tr>
<td></td>
<td>B64G</td>
<td>7/00</td>
</tr>
</tbody>
</table>

No other subclasses/groups are impacted by this Notice of Changes.

This Notice of Changes includes the following [Check the ones included]:

1. CLASSIFICATION SCHEME CHANGES
   - A. New, Modified or Deleted Group(s)
   - B. New, Modified or Deleted Warning(s)
   - C. New, Modified or Deleted Note(s)
   - D. New, Modified or Deleted Guidance Heading(s)

2. DEFINITIONS
   - A. New or Modified Definitions (Full definition template)
   - B. Modified or Deleted Definitions (Definitions Quick Fix)

3. REVISION CONCORDANCE LIST (RCL)

4. CHANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)

5. CHANGES TO THE CROSS-REFERENCE LIST (CRL)
1. CLASSIFICATION SCHEME CHANGES

A. New, Modified or Deleted Group(s)

SUBCLASS B64G - COSMONAUTICS; VEHICLES OR EQUIPMENT THEREFOR

<table>
<thead>
<tr>
<th>Type</th>
<th>Symbol</th>
<th>Indent Level Number of dots (e.g. 0, 1, 2)</th>
<th>“CPC only” text should normally be enclosed in {curly brackets}**</th>
<th>Transferred to#</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>B64G</td>
<td>Subclass</td>
<td>COSMONAUTICS; VEHICLES OR EQUIPMENT THEREFOR</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>B64G1/10</td>
<td>1</td>
<td>Artificial satellites; Systems of such satellites; Interplanetary vehicles (space shuttles B64G1/14)</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>B64G1/1007</td>
<td>2</td>
<td>{Communications satellites}</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>B64G1/1014</td>
<td>2</td>
<td>{Navigation satellites}</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>B64G1/16</td>
<td>1</td>
<td>Extraterrestrial cars</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>B64G1/24</td>
<td>2</td>
<td>Guiding or controlling apparatus, e.g. for attitude control</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>B64G1/40</td>
<td>2</td>
<td>Arrangements or adaptations of propulsion systems</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>B64G1/42</td>
<td>2</td>
<td>Arrangements or adaptations of power supply systems</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>B64G1/44</td>
<td>3</td>
<td>using radiation, e.g. deployable solar arrays</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>B64G1/46</td>
<td>2</td>
<td>Arrangements or adaptations of devices for control of environment or living conditions</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>B64G1/48</td>
<td>3</td>
<td>for treatment of the atmosphere (B64G1/50 takes precedence)</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>B64G1/50</td>
<td>3</td>
<td>for temperature control</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>B64G1/52</td>
<td>2</td>
<td>Protection, safety or emergency devices; Survival aids</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>B64G1/54</td>
<td>3</td>
<td>Protection against radiation</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>B64G1/56</td>
<td>3</td>
<td>Protection against meteoroids or space debris</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>B64G1/58</td>
<td>3</td>
<td>Thermal protection, e.g. heat shields</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>B64G1/66</td>
<td>2</td>
<td>Arrangements or adaptations of apparatus or instruments, not otherwise provided for</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>B64G3/00</td>
<td>0</td>
<td>Observing or tracking cosmonautic vehicles</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>B64G7/00</td>
<td>0</td>
<td>Simulating cosmonautic conditions, e.g. for conditioning crews</td>
<td></td>
</tr>
</tbody>
</table>

*N = new entries where reclassification into entries is involved; C = entries with modified file scope where reclassification of documents from the entries is involved; Q = new entries which are firstly populated with documents via administrative transfers from deleted (D) entries. Afterwards, the transferred documents into the Q entry will either stay or be moved to more appropriate entries, as determined by intellectual reclassification; T = existing entries with enlarged file scope, which receive documents from C or D entries, e.g. when a limiting reference is removed from the entry title; M = entries with no change to
the file scope (no reclassification); D = deleted entries; F = frozen entries will be deleted once reclassification of documents from the entries is completed; U = entries that are unchanged.

NOTES:

• **No {curly brackets} are used for titles in CPC only subclasses, e.g. C12Y, A23Y; 2000 series symbol titles of groups found at the end of schemes (orthogonal codes); or the Y section titles. The {curly brackets} are used for 2000 series symbol titles found interspersed throughout the main trunk schemes (breakdown codes).**

• U groups: it is obligatory to display the required “anchor” symbol (U group), i.e. the entry immediately preceding a new group or an array of new groups to be created (in case new groups are not clearly subgroups of C-type groups). Always include the symbol, indent level and title of the U group in the table above.

• All entry types should be included in the scheme changes table above for better understanding of the overall scheme change picture. Symbol, indent level, and title are required for all types.

• “Transferred to” column **must** be completed for all C, D, F, and Q type entries. F groups will be deleted once reclassification is completed.

• When multiple symbols are included in the “Transferred to” column, avoid using ranges of symbols in order to be as precise as possible.

• For administrative transfer of documents, the following text should be used: “<administrative transfer to XX>”, “<administrative transfer to XX and YY simultaneously>”, or “<administrative transfer to XX, YY, ...and ZZ simultaneously>” when administrative transfer of the same documents is to more than one place.

• **Administrative transfer to main trunk groups is assumed to be the source allocation type, unless otherwise indicated.**

• Administrative transfer to 2000/Y series groups is assumed to be “additional information”.

• If needed, instructions for allocation type should be indicated within the angle brackets using the abbreviations “ADD” or “INV”: <administrative transfer to XX ADD>, <administrative transfer to XX INV>, or <administrative transfer to XX ADD, YY INV, ... and ZZ ADD simultaneously>.

• In certain situations, the “D” entries of 2000-series or Y-series groups may not require a destination (“Transferred to”) symbol, however it is required to specify “<no transfer>” in the “Transferred to” column for such cases.

• For finalization projects, the deleted “F” symbols should have <no transfer> in the “Transferred to” column.

• For more details about the types of scheme change, see CPC Guide.
B. New, Modified or Deleted Warning notice(s)

**SUBCLASS B64G - COSMONAUTICS; VEHICLES OR EQUIPMENT THEREFOR**

<table>
<thead>
<tr>
<th>Type*</th>
<th>Location</th>
<th>Old Warning notice</th>
<th>New/Modified Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>B64G</td>
<td>In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme</td>
<td></td>
</tr>
</tbody>
</table>

*N = new warning, M = modified warning, D = deleted warning

NOTE: The "Location" column only requires the symbol PRIOR to the location of the warning. No further directions such as "before" or "after" are required.
2. A. DEFINITIONS (new)

B64G 1/1007

**Relationships with other classification places**
Communication aspects of communication satellites are classified in H04B 7/185.

B64G 1/44

**References**

*Informative references*
Attention is drawn to the following places, which may be of interest for search:

| Solar cells per se | H01L 31/00 |

B64G 1/52

**References**

*Informative references*
Attention is drawn to the following places, which may be of interest for search:

| Life-saving in general | A62 |
2. A. DEFINITIONS (modified)

B64G

Insert: The following new Informative references section and table.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

| Apparatus for, or methods of, winning materials from extraterrestrial sources | E21C 51/00 |

B64G 1/10

Insert: The following new Limiting references section AND Application-oriented references section and respective tables.

References

Limiting references

This place does not cover:

| Space shuttles | B64G 1/14 |

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

| Radio transmission active relay systems using satellites | H04B 7/185 |

Delete: The Special rules of classification section and text.
Delete: The Limiting references section and table.

Insert: The following new reference to the Informative references table.

References

Informative references
Attention is drawn to the following places, which may be of interest for search:

| Navigation systems | G01S 5/145 |

B64G 1/24

References
Replace: The existing Informative references table with the updated one below.

Informative references
Attention is drawn to the following places, which may be of interest for search:

| Tracking space vehicles | B64G 3/00 |
| Jet propulsion plants | F02K |
| Navigation or navigational instruments | G01C |
| Control of position, course, altitude or attitude of space vehicles in general | G05D 1/00 |

Delete: The Special rules of classification section and text.

B64G 1/40

References
Informative references
Replace:  The table row for symbol F03H with the updated row below.

| Producing a reactive propulsive thrust, not otherwise provided for | F03H |

Special rules of classification

Delete:  The last paragraph of the Special rules of classification so the section now reads as follows:

Details of propulsion systems used as attitude or position control jets proper for B64G 1/26 are still classified within B64G 1/40 as applicable.

Propulsion systems using tethers are placed only in B64G 1/40.

B64G 1/46

References

Delete:  The Limiting references section and table.

Insert:  The following new Informative references section and table.

**Informative references**

Attention is drawn to the following places, which may be of interest for search:

| Space suits                  | B64G 6/00 |

B64G 1/48

References

**Limiting References**

Replace:  The reference text for symbol B64G 1/50 with the updated text below:

| Arrangements or adaptations of devices for temperature control of environment or living conditions | B64G 1/50 |

Delete:  The Special rules of classification section and text.
B64G 1/50

Delete: The Special rules of classification section and text.

B64G 1/54

Delete: The Special rules of classification section and text.

B64G 1/56

References

Informative references

Replace: The reference text for symbol B64G 1/68 with the updated text below:

| Meteoroid or space debris detectors | B64G 1/68 |

Delete: The Special rules of classification section and text.

B64G 1/58

Special rules of classification

Delete: The last paragraph from the Special rules of classification so that the section now reads as follows:

Systems used to shield against thermal loads during re-entry are additionally attributed the symbol B64G 1/62.
B64G 1/66

References

Insert: New References out of a residual place section and table.
Delete: The Informative references section and table.

References out of a residual place

Examples of places in relation to which this place is residual:

| Adaptations to antennas for use in satellites | H01Q 1/28 |

Delete: The Special rules of classification section and text.

B64G 3/00

References

Informative references

Replace: The reference text for symbol G01S with the updated text below:

Radio or other wave systems for navigating or tracking G01S

Delete: The Special rules of classification section and text.

B64G7/00

References:

Informative references

Replace: The reference text for symbol G09B 9/00 as shown below:

Simulators for teaching or training purposes G09B 9/00

Delete: The Special rules of classification section and text.