



## Release Notes for March 14, 2019, Umler System Release

The Umler system release scheduled for Thursday, March 14, 2019, includes functional enhancements to Umler which includes docket implementation work as directed by the Umler Committee directed work to implement new elements, element changes/updates, as well as modifications to permissible values and business rules within the application.

Below are the complete details of this release.

- **Element Updates (New Elements/Element Changes & Updates)**
  - Draft Gear/Cushion Unit Group (B562)
    - Equipment Group(s): BOXC, GOND, HOPP, MISC, TANK, FLAT, IFLT, VFLT, PSGR
    - Element Description: Draft Gear/Cushion Unit Group value as listed in AAR Field Manual Interchange Rule 21 and 59
    - Permissible Values:
      - EOC-1,EOC-1D, EOC-1B, EOC-2, EOC-2D, EOC-2B, EOC-3, EOC-3B,EOC-4, EOC-4B, EOC-5, EOC-5D, EOC-5B, EOC-6, EOC-6D, EOC-6B, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-8F, EOC-9, EOC-9D, EOC-9B, EOC-10, EOC-10D, EOC-10B, EOC-10F, EOC-11, EOC-11D, EOC-11B,EOC-12, EOC-12D, EOC-12B, EOC-13, EOC-13B, EOC-14, EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16, EOC-16D, EOC-16B, EOC-17, EOC-17D, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-23, EOC-23B, EOC-24, EOC-24B, EOC-25E, EOC-26B, EOC-26F, COC-1, COC-2, COC-3, COC-4, COC-5, COC-6, COC-7, COC-8 (AAR Rule 59).
      - A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, Z (AAR Rule 21).
    - Presentation Group: Draft System Components
    - New Rules:
      - Draft Gear / Cushion Unit Group (B562) is mandatory for equipment built on or after January 1, 2019.
      - If Draft Gear / Cushion Unit Group (B562) is not equal to A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, or Z, then Cushion Unit Type (B563) must be populated.
      - When the Draft Gear / Cushion Unit Group (B562) is COC-6, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-9, EOC-9B, EOC-9D, EOC-10, EOC-10B, EOC-10D, EOC-14, EOC-14B, EOC-18D, EOC-23, EOC-23B, EOC-24, EOC-25E, or EOC-26B then the Cushion Unit Type (B563) must be 1.
      - When the Draft Gear / Cushion Unit Group (B562) is EOC-26F then the Cushion Unit Type (B563) must be 2.
      - When the Draft Gear / Cushion Unit Group (B562) is EOC-11, EOC-12, EOC-13, EOC-13B, EOC-15, EOC-15B, EOC-15D, EOC-17, EOC-17B, EOC-17D, EOC-18, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-24B, COC-3,

COC-5, or COC-7 then the Cushion Unit Type (B563) must be 1 or 2.

- When the Draft Gear / Cushion Unit Group (B562) is EOC-8F or EOC-10F then the Cushion Unit Type (B563) must be 2 or 3.
- When the Draft Gear / Cushion Unit Group (B562) is EOC-5, EOC-5B, EOC-5D, EOC-6, EOC-6B, EOC-6D EOC-11B, EOC-11D, EOC-12B, EOC-12D, or COC-4 then the Cushion Unit Type (B563) must be 1, 2, or 3.
- When the Draft Gear / Cushion Unit Group (B562) is EOC-16, EOC-16B, EOC-16D, or COC-1 then the Cushion Unit Type (B563) must be 1, 2, or 4.
- When the Draft Gear / Cushion Unit Group (B562) is EOC-2B, EOC-2D, EOC-3, EOC-3B, EOC-4, EOC-4B, or COC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, or 4.
- When the Draft Gear / Cushion Unit Group (B562) is EOC-1, EOC-1B, EOC-1D, or EOC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5.
- When the Draft Gear / Cushion Unit Group (B562) is COC-8 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5.
- When the Draft Gear / Cushion Unit Group (B562) is EOC-1D, EOC-2, EOC-2D, EOC-2B, EOC-3, EOC-3B, EOC-5, EOC-5D, EOC-5B, EOC-6D, EOC-7, EOC-7B, EOC-9, EOC-9B, EOC-9D, EOC-10D, EOC-11, EOC-11B, EOC-11D, EOC-12D, EOC-14, EOC-14B, EOC-15, EOC-15D, EOC-15B, EOC-16D, EOC-17D, EOC-23, or EOC-23B then the Inches of Travel (B061) must be 10
- When the Draft Gear / Cushion Unit Group (B562) is EOC-16, EOC-16B, EOC-19, EOC-19B, EOC-22, EOC-22B, or EOC-25E then the inches of travel must be 12
- When the Draft Gear / Cushion Unit Group (B562) is EOC-20 or EOC-20B then the Inches of Travel (B061) must be 14
- When the Draft Gear / Cushion Unit Group (B562) is EOC-1B, EOC-4, EOC-4B, EOC-6, EOC-6B, EOC-8, EOC-8B, EOC-8F, EOC-10, EOC-10B, EOC-10F, EOC-12, EOC-12B, EOC-13, EOC-13B, EOC-17, EOC-17B, EOC-18, EOC-18D, EOC-18B, EOC-21, EOC-21B, EOC-24, or EOC-24B then the Inches of Travel (B061) must be 15
- When the Draft Gear / Cushion Unit Group (B562) is COC-2, COC-3, COC-4, COC-5, COC-6, or COC-8 then the Inches of Travel (B061) must be 20
- When the Draft Gear / Cushion Unit Group (B562) is COC-1, and Cushion Unit Type (B563) is 1 or 2, then the Inches of Travel (B061) must be 20.
- When the Draft Gear / Cushion Unit Group (B562) is COC-1, and Cushion Unit Type (B563) is 4, then the Inches of Travel (B061) must be 18.
- When the Draft Gear / Cushion Unit Group (B562) is COC-7, and Cushion Unit Type (B563) is 2, then the Inches of Travel (B061) must be 20.

- When the Draft Gear / Cushion Unit Group (B562) is COC-7, and Cushion Unit Type (B563) is 1, then the Inches of Travel (B061) must be 30.
  - When the Draft Gear / Cushion Unit Group (B562) is EOC-1 then the Inches of Travel (B061) must be 10, 12, or 15
  - When the Draft Gear / Cushion Unit Group (B562) is EOC-26, then the Inches of Travel (B061) must be 18.
  - When the Draft Gear / Cushion Unit Group (B562) is COC-7, and Cushion Unit Type (B563) is 2, then the Inches of Travel (B061) must be 20.
  - When the Draft Gear / Cushion Unit Group (B562) is COC-7, and Cushion Unit Type (B563) is 1, then the Inches of Travel (B061) must be 30.
- Draft/Gear/Cushion Unit Type (B563) \*
- Equipment Group(s): BOXC, GOND, HOPP, MISC, TANK, FLAT, IFLT, VFLT, PSGR
  - Element Description: Draft Gear/Cushion Unit Type value as listed in AAR Field Manual Interchange Rule 21 and 59
  - Permissible Values:
    - 1 - Type 1
    - 2 - Type 2
    - 3 - Type 3
    - 4 - Type 4
    - 5 - Type 5
    - S - Type S
  - Presentation Group: Draft System Components
  - New Rules:
    - Draft Gear / Cushion Unit Type (B563) is mandatory for equipment built on or after January 1, 2019.
    - If Draft Gear / Cushion Unit Group (B562) is not equal to A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, or Z, then Cushion Unit Type (B563) must be populated.
    - When the Draft Gear / Cushion Unit Group (B562) is COC-6, EOC-7, EOC-7B, EOC-8, EOC-8B, EOC-9, EOC-9B, EOC-9D, EOC-10, EOC-10B, EOC-10D, EOC-14, EOC-14B, EOC-18D, EOC-23, EOC-23B, EOC-24, EOC-25E, or EOC-26B then the Cushion Unit Type (B563) must be 1.
    - When the Draft Gear / Cushion Unit Group (B562) is EOC-26F then the Cushion Unit Type (B563) must be 2.
    - When the Draft Gear / Cushion Unit Group (B562) is EOC-11, EOC-12, EOC-13, EOC-13B, EOC-15, EOC-15B, EOC-15D, EOC-17, EOC-17B, EOC-17D, EOC-18, EOC-18B, EOC-19, EOC-19B, EOC-20, EOC-20B, EOC-21, EOC-21B, EOC-22, EOC-22B, EOC-24B, COC-3, COC-5, or COC-7 then the Cushion Unit Type (B563) must be 1 or 2.
    - When the Draft Gear / Cushion Unit Group (B562) is EOC-8F or EOC-10F then the Cushion Unit Type (B563) must be 2 or 3.

- When the Draft Gear / Cushion Unit Group (B562) is EOC-5, EOC-5B, EOC-5D, EOC-6, EOC-6B, EOC-6D EOC-11B, EOC-11D, EOC-12B, EOC-12D, or COC-4 then the Cushion Unit Type (B563) must be 1, 2, or 3.
  - When the Draft Gear / Cushion Unit Group (B562) is EOC-16, EOC-16B, EOC-16D, or COC-1 then the Cushion Unit Type (B563) must be 1, 2, or 4.
  - When the Draft Gear / Cushion Unit Group (B562) is EOC-2B, EOC-2D, EOC-3, EOC-3B, EOC-4, EOC-4B, or COC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, or 4.
  - When the Draft Gear / Cushion Unit Group (B562) is EOC-1, EOC-1B, EOC-1D, or EOC-2 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or S.
  - When the Draft Gear / Cushion Unit Group (B562) is COC-8 then the Cushion Unit Type (B563) must be 1, 2, 3, 4, or 5.
  - When the Draft Gear / Cushion Unit Group (B562) is COC-1, and Cushion Unit Type (B563) is 1 or 2, then the Inches of Travel (B061) must be 20.
  - When the Draft Gear / Cushion Unit Group (B562) is COC-1, and Cushion Unit Type (B563) is 4, then the Inches of Travel (B061) must be 18.
- Clearance Exception (B275)
    - Equipment Group(s): PSGR
    - Description: Describes equipment containing nonstandard dimension
    - Presentation Group: Train Service
    - Permissible Value(s):
      - A - Excessive Outside Extreme Height (A185)
      - B - Excessive Outside Extreme Width (A186)
      - P - Passenger equipment with Undercarriage Exceptions below 3 ft 4-1/2 in.
      - Q - Passenger equipment with both Excessive Outside Extreme Width (A186) (calculated for swingout) and Undercarriage Exceptions below 3 ft 4-1/2 in.
    - Element added to PSGR Equipment Group
  - PTC Operating Status (L024)
    - Equipment Group(s): LOCO
    - Element is Mandatory
  - Event Recorder No. of Days (L006)
    - Equipment Group(s): LOCO
    - Element updated to Carry Forward on Add Back
  - ABT L2 Periodic Interval (L007)
    - Equipment Group(s): LOCO
    - Element updated to Carry Forward on Add Back

\*Indicates this is a new element.

- ABT L3 Periodic Interval (L008)
  - Equipment Group(s): LOCO
  - Element updated to Carry Forward on Add Back
- Draft System Type (B073)
  - Equipment Group(s): BOXC, GOND, HOPP, MISC, TANK, FLAT, IFLT, VFLT, PSGR
    - Element label: Changed from 'Draft Gear/Cushion Type' to 'Draft System Type'
- **Permissible Value Updates - Updates/Removals/New Values**
  - Tank Lining Material (A315)
    - Equipment Group(s): TANK
    - New Permissible Value:
      - U - Unlined
  - Equipment Builder (A035)
    - Equipment Group(s): GOND, TANK
    - New Permissible Value(s):
      - VERM - Vertex
  - Coupler Code (A057)
    - Equipment Group(s): BOXC, GOND, HOPP, TANK, FLAT, IFLT, VFLT, MISC, PSGR
    - New Permissible Value(s):
      - EF204CE - Type E/F (Rule 17) - EF204CE
- **Business Rule Changes - New/Changed or Updated/Removed Rules**
  - Tank Lining Material (A315)
    - Equipment Group(s): TANK
    - New Rule:
      - Tank Lining Material is required for Tanks that have a Built/Rebuilt (Birth) Date on or after March 14, 2019.
  - Non-Compliant Wheelsets (B544)
    - Equipment Group(s): BOXC, GOND, HOPP, MISC, TANK, FLAT, IFLT, and VFLT
    - Updated Rule(s):
      - A Wheelset Component ID is required for each applicable location on equipment built on or after January 1, 2016.
      - A Wheelset Component ID is required for each applicable location on equipment rebuilt on or after January 1, 2016 and Gross Rail Load (A266) is greater than 268,000 lbs.

- Weighing Status (A289)
  - Equipment Group(s): BOXC, GOND, HOPP, MISC, TANK, FLAT, IFLT, VFLT
  - Updated Rule(s):
    - When Status Code changes to Active or Inactive Weighing Status must be reported as Actual (A) or Verified (V) within 90 days of Status Code change.
  
- Autorack Category (ARCG)
  - Equipment Group(s): VFLT
  - System Generated
  - Updated logic to generate Autorack Category:
    - Superstructures Integrated with Car and the Built Date (BLDT) is added or changed:
      - Any Rebuilt / ILS Date (RBDT), Autorack Certification (ARC), Autorack Repair (ARR), and Autorack Inspection (ARI) with a date less than the entered Built Date (BLDT) will be removed
      - A new Autorack Certification (ARC) will be added
        - Inspection Date Done (DTDN) = Built Date (BLDT)
        - Inspection Performer (PERF) = RAIL
        - Inspection Reporter (REPT) = RAIL
        - Location (SPLC) = 411657000
      - A new Autorack Inspection (ARI) will be added
        - Inspection Date Done (DTDN) = Built Date (BLDT)
        - Inspection Performer (PERF) = RAIL
        - Inspection Reporter (REPT) = RAIL
        - Location (SPLC) = 411657000
        - Inspector ID (INID) = M999
        - Nine Inspection Elements = 1
      - The new Autorack Inspection (ARI) will generate an Autorack Category (ARCG) to "1"
    - Superstructures Integrated with Car and the Rebuilt Date (RBDT) is added or changed:
      - Any Autorack Certification (ARC), Autorack Repair (ARR), and Autorack Inspection (ARI) with a date less than the entered Rebuilt Date (RBDT) will be removed
      - A new Autorack Certification (ARC) will be added
        - Inspection Date Done (DTDN) = Rebuilt Date (RBDT)
        - Inspection Performer (PERF) = RAIL
        - Inspection Reporter (REPT) = RAIL
        - Location (SPLC) = 411657000
      - A new Autorack Inspection (ARI) will be added
        - Inspection Date Done (DTDN) = Rebuilt Date (RBDT)
        - Inspection Performer (PERF) = RAIL
        - Inspection Reporter (REPT) = RAIL
        - Location (SPLC) = 411657000

\*Indicates this is a new element.

- Inspector ID (INID) = M999
    - Nine Inspection Elements = 1
  - The new Autorack Inspection (ARI) will generate an Autorack Category (ARCG) to "1"
- Superstructures not Integrated with Car and the Superstructure Built Date (SBDT) is added or changed:
  - Any Superstructure Rebuilt Date (SRDT), Autorack Certification (ARC), Autorack Repair (ARR), and Autorack Inspection (ARI) with a date less than the entered Superstructure Built Date (SBDT) will be removed
  - A new Autorack Certification (ARC) will be added
    - Inspection Date Done (DTDN) = Superstructure Built Date (SBDT)
    - Inspection Performer (PERF) = RAIL
    - Inspection Reporter (REPT) = RAIL
    - Location (SPLC) = 411657000
  - A new Autorack Inspection (ARI) will be added
    - Inspection Date Done (DTDN) = Superstructure Built Date (SBDT)
    - Inspection Performer (PERF) = RAIL
    - Inspection Reporter (REPT) = RAIL
    - Location (SPLC) = 411657000
    - Inspector ID (INID) = M999
    - Nine Inspection Elements = 1
  - The new Autorack Inspection (ARI) will generate an Autorack Category (ARCG) to "1"
- Superstructures not Integrated with Car and the Superstructure Rebuilt Date (SRDT) is added or changed:
  - Any Autorack Certification (ARC), Autorack Repair (ARR), and Autorack Inspection (ARI) with a date less than the entered Superstructure Rebuilt Date (SRDT) will be removed
  - A new Autorack Certification (ARC) will be added
    - Inspection Date Done (DTDN) = Superstructure Rebuilt Date (SRDT)
    - Inspection Performer (PERF) = RAIL
    - Inspection Reporter (REPT) = RAIL
    - Location (SPLC) = 411657000
  - A new Autorack Inspection (ARI) will be added
    - Inspection Date Done (DTDN) = Superstructure Rebuilt Date (SRDT)
    - Inspection Performer (PERF) = RAIL
    - Inspection Reporter (REPT) = RAIL
    - Location (SPLC) = 411657000
    - Inspector ID (INID) = M999
    - Nine Inspection Elements = 1
  - The new Autorack Inspection (ARI) will generate an Autorack Category (ARCG) to "1"

- Autorack Certification is reported:
  - Any Autorack Repair (ARR), and Autorack Inspection (ARI) with a date less than the entered Autorack Certification (ARC) Date will be removed
  - A new Autorack Inspection (ARI) will be added
    - Inspection Date Done (DTDN) = Superstructure Rebuilt Date (SRDT)
    - Inspection Performer (PERF) = RAIL
    - Inspection Reporter (REPT) = RAIL
    - Location (SPLC) = 411657000
    - Inspector ID (INID) = M999
    - Nine Inspection Elements = 1
  - The new Autorack Inspection (ARI) will generate an Autorack Category (ARCG) to "1"
- Autorack Repair (ARR) is reported:
  - Any Autorack Inspection (ARI) with a date less than the entered Autorack Repair (ARR) Date will be removed
  - The Autorack Category (ARCG) will be changed to blank
- New Superstructure is added to Umler:
  - The Autorack Category (ARCG) will be set to "1"

**Got Questions? Get Answers.**

If you have any questions about Railinc's Umler system or this release, contact the Railinc Customer Success Center by email at [csc@railinc.com](mailto:csc@railinc.com) or by phone at 877-724-5462.