

Remove the formationCount Field

CR Number (ID): 144		Submission Date: 3/16/2022	
GENERAL INFORMATION (AUTHOR TO COMPLETE)			
Author	FAA FIXM Development Team		
Brief Description (Subject)	Remove formationCount from the Aircraft package.		
Priority*	<input type="checkbox"/> Immediate	<input type="checkbox"/> High	<input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low
Scale*	<input type="checkbox"/> Major	<input type="checkbox"/> Medium	<input checked="" type="checkbox"/> Minor
Expected Impact to Implementers*	<input type="checkbox"/> High	<input type="checkbox"/> Medium	<input checked="" type="checkbox"/> Low <input type="checkbox"/> None
Target FIXM Component(s)	<input checked="" type="checkbox"/> FIXM Logical Model <input type="checkbox"/> FIXM Application <input checked="" type="checkbox"/> FIXM XML Schemas <input type="checkbox"/> Other Specify...		
Target FIXM Release	<input checked="" type="checkbox"/> FIXM Core Version 4.3.0 <input type="checkbox"/> Application Version		
Related FIXM CRs			
Motivation / Change Reason	<input type="checkbox"/> Requirement <input checked="" type="checkbox"/> Functionality/Operability <input type="checkbox"/> Maintenance <input type="checkbox"/> Defect <input type="checkbox"/> Other Specify ...		

* Optional fields; FIXM Secretariat may update during review

MOTIVATION / CHANGE REASON DESCRIPTION (AUTHOR TO COMPLETE)

Currently, the number of aircraft in a formation flight is stored in two locations in FIXM:

1. In the formationCount field associated with the Aircraft class.
2. As the aggregate of the numberOfAircraft fields in the AircraftType class.

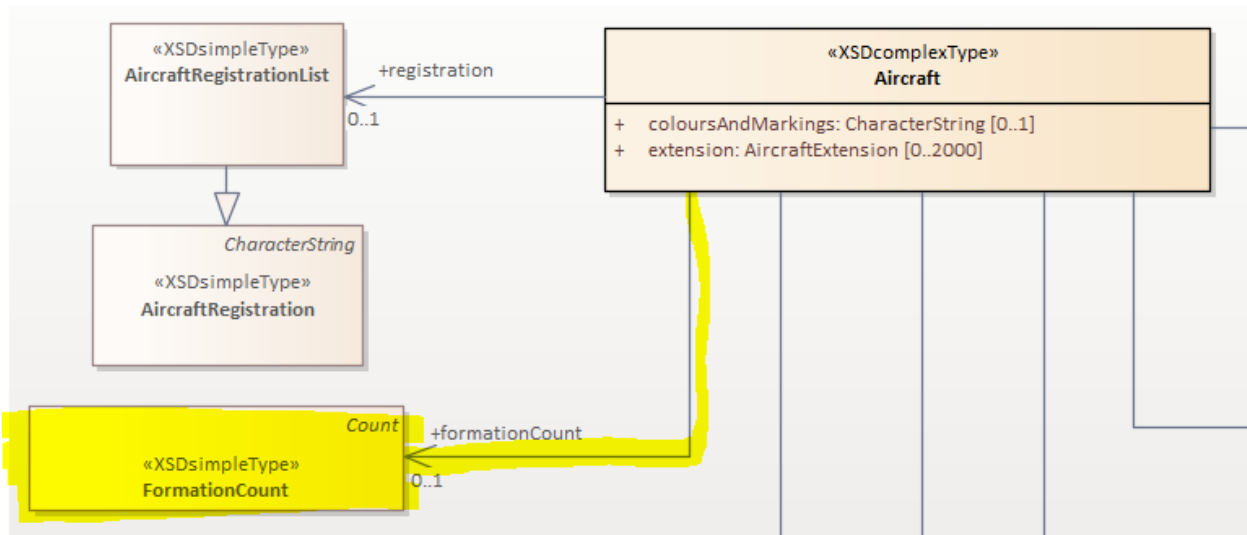
Having two places to store the same information is redundant and opens the potential for inconsistent information. For formation flights with a single type of aircraft, the information in these two locations would be strictly redundant. For formation flights with multiple types of aircraft, the values in the latter location would have to be added together to compute the value in the former location. However, requiring a recipient of such information to do the calculation is at best a minimal burden.

For such heterogeneous formation flights, field 9b in the ATS FPL flight plan must contain “ZZZZ” for the aircraft type, and field 18 must contain a TYP/ entry such as “TYP/2F16 3K35R,” i.e. 2 of the first type and 3 of the second type. Field 9a would contain the sum, i.e., 5, but it is not necessary to maintain this information in two places in FIXM.

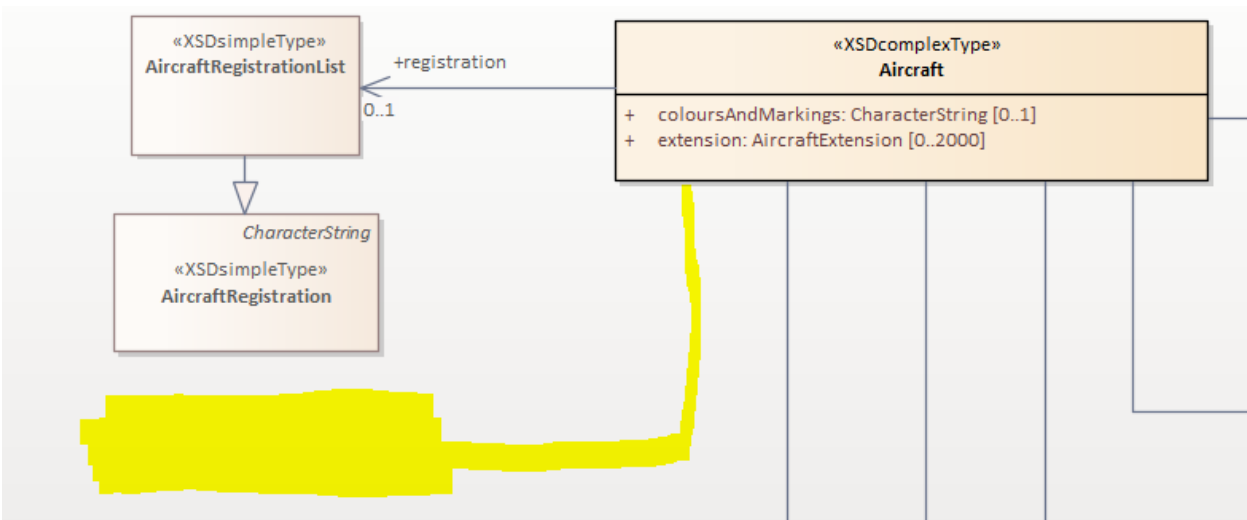
PROPOSED CHANGE (AUTHOR TO COMPLETE)

The impact of this change is shown below.

Current Model:



Updated Model:



This change will result in the removal of the formationCount association as well as the FormationCount class (since this class is not used elsewhere in the model).

CCB SECRETARIAT	
External Standard Consistency Checked	<input type="checkbox"/> AIDX <input type="checkbox"/> AIRM
CR Status	<input checked="" type="checkbox"/> Proposed <input type="checkbox"/> Implemented <input type="checkbox"/> Withdrawn <input type="checkbox"/> Rejected
Decision Date	Click or tap to enter a date
Implemented In	X.X.X
Comments	Click or tap here to add any additional information or comments.

IMPLEMENTATION NOTES (CCB SECRETARIAT TO COMPLETE)

CCB Secretariat notes on any deviations that were required during implementation.