

MICRO CLASS INSPECTION CHECKLIST

Technical and Safety-2015

TEAM NUMBER: _____

TEAM NAME: _____

“With the exception of a standard tape measure, Teams shall provide any materials and/or tools required to demonstrate compliance with Technical Inspection requirements.”

Caution: Aircraft is to be presented with prop, flight battery AND red shunt plug removed

	PASS	FAIL	Rule
Aircraft Container			
Aircraft is in container with prop, battery and Red arming plug uninstalled.	_____	_____	Safety
Weight of fully packed Micro aircraft container is 10 lbs. or less.	_____	_____	6.3.10
Container maximum cross section measurement cannot be greater than 6" measured to outside surface of the container.	_____	_____	6.3.10
Complete school name, school address and team number on container	_____	_____	6.3.10
Container has a carrying handle AND shoulder strap	_____	_____	6.3.10
Propulsion system battery not installed in aircraft while packed in container	_____	_____	6.3.9
All aircraft parts except for transmitter and spares fit in container	_____	_____	6.3.9
If there is a separate flight control/radio battery not installed in aircraft, the radio battery has a dedicated location in the aircraft container.	_____	_____	6.3.9
Aircraft Identification			
Team number on top and bottom of wing: 3" numbers	_____	_____	6.1.2
Team number on both sides of aircraft: 3" numbers	_____	_____	6.1.2
University name or initials (wing or fuselage)	_____	_____	6.1.2
Complete university name and address (inside fuse or out)	_____	_____	6.1.4
Safety Equipment			
Team has at least two pairs of safety glasses and at least one hard hat	_____	_____	6.2.6
Model should be assembled without prop for rest of checklist			
Do not install prop, motor battery or red arming plug until indicated	_____	_____	Safety
Aircraft Drawing Inspection			
Compare actual measurements to measurements of submitted drawings Note and report differences in span, length, height (1/4" tolerance), _____			7.1.2.3
Aircraft Weight and Balance: check against drawing			
Team must demonstrate a flyable balanced aircraft at center of gravity per submitted drawings (empty weight, no payload installed)	_____	_____	7.1.2.5

	PASS	FAIL	Rule
Payload and Payload Bay			
Payload does not contribute to the structural integrity of the airframe and is properly secured to the airframe to prevent shifting in flight	_____	_____	6.2.4.2
Payload consists of plates and a support assembly. (Bay is not part of payload)	_____	_____	6.2.4.1
Support assembly retains payload plates as a homogenous mass	_____	_____	6.2.4.1
The aircraft has a fully enclosed discrete payload bay.	_____	_____	6.2.4.3
Enclosed payload bay of aircraft must fit a test block that is 1.5"x 1.5"x 5"	_____	_____	
The allowable size tolerance for the enclosed payload bay is +/- .10"	_____	_____	6.2.4.3
Red Arming Plug			
A removable and visible red battery arming plug must be located on top of the fuselage at 40% to 60% of the length of the aircraft	_____	_____	6.3.4
Battery or Batteries			
If two batteries used, motor battery not installed yet	_____	_____	Safety
If two batteries used, radio system battery must be of a suitable size	_____	_____	Safety
Maximum flight battery size is 3 cell 2200 mAh lithium polymer. (Smaller flight battery is allowed)	_____	_____	6.3.1
Motor(s) and Gearboxes (if applicable)			
Properly mounted and secure	_____	_____	Safety
Spinner or safety nut/no metal prop. (Prop Savers are NOT allowed due to chance of prop coming off of the prop saver.)	_____	_____	6.3.5&6 Safety
Lead Prohibited: No lead in aircraft or payload	_____	_____	6.2.4.4
Wings, Tails and Control surfaces			
Wings and tail assemblies free of warps and mounted securely	_____	_____	Safety
Control surfaces, hinges and control horns secure and free from slop	_____	_____	6.3.7
All linkages secure. If a clevis is used, it must have a keeper.	_____	_____	Safety
Landing Gear and Wheels (if applicable)			
Gear mounted securely	_____	_____	Safety
Wheel collars secure	_____	_____	Safety
Radio Equipment			
Radio is a 2.4 GHz system	_____	_____	6.3
All servos properly sized for aircraft	_____	_____	6.3.8
All servos installed properly and securely mounted	_____	_____	Safety
Radio power switch mounted properly, if applicable	_____	_____	Safety
Receiver mounted securely	_____	_____	Safety

Throttle and Radio Function

	PASS	FAIL	Rule
Confirm Red arming plug removed	_____	_____	Safety
Battery or batteries installed and secure	_____	_____	Safety
Connect all batteries, turn on TX and aircraft radio system	_____	_____	Safety
Install Red arming plug	_____	_____	Safety
All flight control (and ground steering servos if applicable) operate in correct direction and with no clashing or overloading	_____	_____	Safety
Check for correct throttle response	_____	_____	Safety
Check that low throttle and/or low throttle trim completely stops motor	_____	_____	Safety
Motor turns in correct direction	_____	_____	Safety
Functional fail safe (Motor must go to zero RPM if TX signal lost)	_____	_____	Safety
Remove red arming plug, remove flight battery and turn off aircraft	_____	_____	Safety
Turn off TX	_____	_____	Safety

Inspections Sticker(s)

All airframe parts stickered after technical inspection (wings, fuselage, tail if removable, spare airframe parts, if any)	_____	_____	
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First Inspector _____

Second Inspector _____

Instructions: First inspector notes pass or fail items. If anything does not pass, that item must be corrected by the team and re-inspected by the second inspector.