DRONE FUTURES

Atlanta Bureau of Air and Space (ABAS) is an experimental studio and architectural think-tank geared to consider the advanced potentialities tied to an imminent future when small unmanned aerial systems (sUAS) constitute various forms of ubiquitous utility beyond the current state of our collective imagination. Anticipating a time when the airspace below 400’ is variably granular, dynamically regulated and thick with newly formed protocols, rights and opportunities, this studio will rapidly map such working relationships onto a large swath of Atlanta and develop manifold typological building components seamless with the projected air space systems at hand. ABAS provides an opportunity to critically imagine and develop new architectural configurations and types within this thickened air space through a mode of practice that utilizes design motivation, iterative exploration and refinement at every step along the way. Studio participants can expect to unleash a wide array of digital and physical production tools, working both rapidly and precisely with a strong bias towards producing physical evidence through advanced means.

DRONOSKINS

During the first half of the semester, ABAS participants will iteratively develop and refine thick building envelope and drone portal systems geared to target future retrofitting of selected (existing) buildings within the urban fabric mapped by studio participants. Conceivably lightweight, deep and inverted roof or wall plenum assemblies, these configurations will be designed through an intensive yet focused spectrum of digital-physical tools, techniques and operational protocols. Medium scale physical models will serve as the primary tool to review progress in this phase of exploration, with highly refined models finalized for our studio mid-review.

AUGMENTED REALITY (AR)

While the intricacies of producing customized AR applications for use on Android based phones and tablets are quite complex and inherently prone to extensive chapters of troubleshooting during development, this studio will aim to do just that. DRONOSKIN models will be used as instruments to develop 3-dimensional interactive augmented reality interfaces, by superimposing digital information and effects into the live camera view of personal devices for our studio mid-review.

LOW-RES TYPES / HI-FI MODELS

Synthesizing all of the above, the second half of the semester will utilize the collective body of work and gained insights in order to design a large catalog of low-resolution, new building types specific to ABAS projections. Detailed, medium-scaled physical models of extractions from potentials within this catalog of building types are to be produced at high levels of fidelity, incorporating AR for various forms of critical engagement at our final studio review.

Working Schedule / Workshops TBD.