**AFSL Publication Numbers**

This document summarizes the different documents that the AFSL has produced that contain publication numbers.

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| **Publication Number** | **Title or Description** | **Comment** | **File Location** |
| AFSL-2014-01 | New Team Member Orientation Document [1] | Orientation for new AFSL members | \\AFSL\LabInfo\NewLabMemberOrientation.docx |
| AFSL-2015-01 | Skywalker X-8 Aircraft Flight Manual [2] | Base AFM for Skywalker X-8 aircraft | \\FlightOperations\UAS\Skywalker\_1900\UW\_Skywalker\_1900\_AFM.docx |
| AFSL-2015-02 | HAPRA Aircraft Flight Manual [3] | Derived from AFSL-2015-01 | \\FlightOperations\UAS\HAPRA\HAPRAAircraftFlightManual.docx |
| AFSL-2015-03 | Modeling Aircraft Position and Conservatively Calculating Airspace Violations for an Autonomous Collision Awareness System for Unmanned Aerial Systems [4] | Kevin Ueunten Master’s Thesis | \\JCATI2013\TechnicalDataPackage\KevinUeuntenThesis\Thesis\UeuntenThesis.pdf |
| AFSL-2015-04 | Conservative Algorithms for Automated Collision Awareness for Multiple Unmanned Aerial Systems [5] | IEEE Aerospace conference paper | \\JCATI2013\TechnicalDataPackage\IEEE Paper\CompiledVersions\MAIN\_collision\_awareness\_plugin.pdf |
| AFSL-2015-05 | Automatic Wildfire Detection and Simulation Using Optical Information from Unmanned Aerial Systems [6] | SAE Aerotec conference paper | \\AustraliaBushfire\TechnicalDataPackage\ConferencePaper\WordVersion\WildfireDetectionWithUAS\_SAE.pdf |
| AFSL-2015-06 | Using Agisoft Photoscan for Photogrammetry 101 [7] |  | \\Mapping\TechnicalDataPackage\AgiSoft\_PhotoScan\Using Agisoft Photoscan for Photogrammetry 101 (updated).docx |
| AFSL-2015-07 | Mission Planner Operational Checklists and Notes [8] | Notes on how to operate Mission Planner | \\FlightOperations\UAS\CommonDocuments\MissionPlanner\OperationalChecklistsAndNotes.docx |
| AFSL-2015-08 | Arduplane Build Notes [9] | ArduPlane build notes | \\FlightOperations\UAS\CommonDocuments\ArduPlane\ArduPlaneModification\ArduplaneBuildNotes.docx |
| AFSL-2015-09 | Mission Planner Build Notes [10] | Mission Planner build notes | \\FlightOperations\UAS\CommonDocuments\MissionPlanner\MissionPlannerModification\MissionPlannerBuildNotes.docx |
| AFSL-2015-10 | Mobius Action Cam [11] | Mobius camera notes | \\FlightOperations\UAS\CommonDocuments\Mobius\_FPV\_Camera\ProceduresAndChecklists.docx |
| AFSL-2015-11 | Procedures and Checklists for RedEdge Operation [12] | MicaSense RedEdge notes | \\FlightOperations\UAS\CommonDocuments\MicaSense\_RedEdge\ProceduresAndChecklists.docx |
| AFSL-2015-12 | Transmitter Notes [13] | Denotes which transmitters are allocated to which systems | \\FlightOperations\UAS\CommonDocuments\Transmitters\TransmitterNotes.docx |
| AFSL-2015-13 | Mission Procedures and Checklists [14] | Master template for planning missions/excursions. | \\FlightOperations\Operations\Missions\MASTER\ProceduresAndChecklists.docx |
| AFSL-2015-14 | NX Installation [15] | How to install Siemens NX | \\AFSL\HowToDocumentation\installing\_NX.docx |
| AFSL-2015-15 | Perforce Notes [16] | Various notes on Perforce usage | \\AFSL\ComputingInfo\Perforce\PerforceNotes.docx |
| AFSL-2015-16 | LiPo Battery Charging Instruction [17] | Charging LiPo batteries | \\AFSL\HowToDocumentation\LiPoBatteryChargingInstruction.docx |
| ~~AFSL-2015-17~~ | ~~Creating a Perforce New Depot~~ [18] | ~~How to create a new depot in Perforce~~ | ~~\\AFSL\HowToDocumentation\Perforce Creating New Depot.docx~~ |
| ~~AFSL-2015-18~~ | ~~Perforce License Installation~~ [19] | ~~How to install a license on Perforce~~ | ~~\\AFSL\HowToDocumentation\Perforce License Installation.docx~~ |
| ~~AFSL-2015-19~~ | ~~Perforce on Mac – hostname problem~~ [20] | ~~A partially working solution to use Perforce on a Mac.~~ | ~~\\AFSL\HowToDocumentation\Perforce on Mac - hostname problem.docx~~ |
| ~~AFSL-2015-20~~ | ~~Perforce Server Setup~~ [21] | ~~Notes on how to setup a new Perforce server~~ | ~~\\AFSL\HowToDocumentation\Perforce Server Setup.docx~~ |
| AFSL-2015-21 | UW OneDrive [22] | How to access the UW OneDrive for Business system | \\AFSL\HowToDocumentation\UW\_OneDrive.docx |
| AFSL-2015-22 | Pilot’s Operating Manual: X-Plane 10 Flight Simulator [23] | Basic notes on X-Plane simulator. | \\AFSL\HowToDocumentation\Pilot Operating Manual.docx |
| AFSL-2015-23 | Multirotor Autonomous Research Vehicle (MARV) Aircraft Flight Manual [24] | MARV aircraft flight manual | \\FlightOperations\UAS\MARV\MARV\_AFM.docx |
| AFSL-2015-24 | Anakin Aircraft Flight Manual [25] | Anakin Aircraft Flight Manual | \\FlightOperations\UAS\Anakin\AnakinAircraftFlightManual.docx |
| AFSL-2015-25 | The Research Civil Aircraft (RCAM) Simulator [26] | Setting up the RCAM simulation w/ X-Plane | \\Teaching\aa516\TechnicalDataPackage\RCAMSimulator\RCAMSimulatorSetup.docx |
| AFSL-2015-26 | AFSL Lab Safety Information [27] | Single, master safety document | \\AFSL\LabInfo\LabSafety.docx |
| AFSL-2016-01 | Mobile Flight Operations Center (MFOC) User Manual [28] | MFOC user manual and notes | \\FlightOperations\UAS\MFOC\MFOCUserManual.docx |
| AFSL-2016-02 | UAS Reliability and Risk [29] | Wiley Encyclopedia for Aerospace Engineering article | \\RiskAssessment\TechnicalDataPackage\WileyPaper\UASReliabilityAndRiskAnalysis\_FROMWILEY.pdf |
| AFSL-2016-03 | Multispectral Imaging and Elevation Mapping from an Unmanned Aerial System for Precision Agriculture Applications [30] | International Society for Precision Agriculture conference paper | \\Mapping\TechnicalDataPackage\ConferencePaper\Paper\Final Paper 101 Christopher Lum.docx |
| AFSL-2016-04 | Launcher Configuration and Operation Manual [31] | Launcher user’s manual | \\FlightOperations\UAS\CommonDocuments\Launcher\LauncherOperationManual.docx |
| AFSL-2016-05 | Crop dusting ExpeRimEntal System (CERES) Aircraft Flight Manual [32] | CERES aircraft flight manual | \\FlightOperations\UAS\CERES\CERESAircraftFlightManual.docx |
| AFSL-2016-06 | Arduplane Operational Checklists and Notes [33] | Note regarding Arduplane. Includes SITL notes | \\FlightOperations\UAS\CommonDocuments\ArduPlane\OperationalChecklistsAndNotes.docx |
| AFSL-2016-07 | 2016 Aeronautics and Astronautics Capstone: Crop Dusting Experimental System [34] | CERES final report | \\CERES\TechnicalDataPackage\CERES\_Final\_Report\CERES\_Final\_Report.pdf |
| AFSL-2016-08 | ADS-B Payload User Manual [35] | ADS-B payload user’s manual | \\FlightOperations\UAS\CommonDocuments\ADSBPayload\ADSBPayloadUserManual.docx |
| AFSL-2016-09 | Creating NDVI and DSM Maps Using QGIS Software [36] | How to use QGIS for mapping purposes | \\Mapping\TechnicalDataPackage\QGIS\Creating NVDI and DSM maps from QGIS.docx |
| AFSL-2016-10 | UW Skywalker 1900 Aircraft Flight Manual [37] | Base AFM for Skywalker 1900 aircraft | \\FlightOperations\UAS\Skywalker\_1900\UW\_Skywalker\_1900\_AFM.docx |
| AFSL-2016-11 | The Camera Operated Navigation Done Outside (GPS) Ranges (CONDOR) Aircraft Flight Manual [38] | CONDOR aircraft flight manual | \\FlightOperations\UAS\CONDOR\CondorAircraftFlightManual.docx |
| AFSL-2016-12 | Retractable Pan-Tilt Gimbal System for  Skywalker 1900 [39] | CONDOR Gimbal | \\FlightOperations\UAS\CONDOR\SubSystems\CameraGimbal\CondorGimbalManual.docx |
| AFSL-2016-13 | UWPython Notes [40] | How to install the UW Python SDK. | \\UWPython\TechnicalDataPackage\UWPythonNotes.docx |
| AFSL-2016-14 | The Topography and Ecology Data Drone (TEDD) Aircraft Flight Manual [41] | TEDD aircraft flight manual | \\FlightOperations\UAS\TEDD\TEDDAircraftFlightManual.docx |
| AFSL-2016-15 | Two NextGen Air Safety Tools: An ADS-B Equipped UAV and a Wake Turbulence Estimator [42] | Ward Handley’s Master’s Thesis | \\JCATI2015\TechnicalDataPackage\Ward Handley Thesis\thesisHandleyAsSubmitted.pdf |
| AFSL-2016-16 | FUndamentals of Networking Research Aircraft (FUNRA) Aircraft Flight Manual [43] | FUNRA aircraft flight manual | \\FlightOperations\UAS\FUNRA\FUNRAAircraftFlightManual.docx |
| AFSL-2016-17 | Argo Aircraft Flight Manual [44] | Argo aircraft flight manual | \\FlightOperations\UAS\Argo\ArgoAircraftFlightManual.docx |
| AFSL-2016-18 | Antenna Tracker Operation Manual [45] | Antenna tracker user’s manual | \\FlightOperations\UAS\CommonDocuments\AntennaTracker\AntennaTrackerOperationManual.docx |
| AFSL-2016-19 | AFSL Flight Operations Manual [46] | Master manual that details generic flight operation procedures | \\FlightOperations\Operations\AFSLFlightOperations\AFSLFlightOperationsManual.docx |
| AFSL-2016-20 | The Ground Robot for Off-road Vehicular Experimentation & Research (GROVER) Operator’s Manual [47] | GROVER operator’s manual | \\FlightOperations\UAS\GROVER\GROVEROperatorsManual.docx |
| AFSL-2016-21 | Arduino with Matlab & Simulink [48] | Notes on building Matlab/Simulink on Arduino | \\Arduino\TechnicalDataPackage\MatlabSimulink\ArduinoWithMatlabSimulink.docx |
| AFSL-2016-22 | Leia Aircraft Flight Manual [49] | Leia aircraft flight manual | \\FlightOperations\UAS\Leia\LeiaAircraftFlightManual.docx |
| AFSL-2016-23 | Sagetech Clarity Operations Manual & Notes [50] | Note regarding operation of Sagetech Clarity | \\FlightOperations\UAS\CommonDocuments\Sagetech\_Clarity\ClarityOperationAndNotes.docx |
| AFSL-2016-24 | Luke Aircraft Flight Manual [51] | Luke aircraft flight manual | \\FlightOperations\UAS\Luke\LukeAircraftFlightManual.docx |
| AFSL-2016-25 | Falco Aircraft Flight Manual [52] | Falco aircraft flight manual | \\FlightOperations\UAS\Falco\FalcoAircraftFlightManual.docx |
| AFSL-2016-26 | Flight Training Information [53] | Background info for flight training | \\FlightOperations\Operators\Training\FlightTrainingInformation.docx |
| AFSL-2016-27 | SAM Aircraft Flight Manual [54] | SAM aircraft flight manual | \\FlightOperations\UAS\SAM\SAMAircraftFlightManual.docx |
| AFSL-2016-28 | EAGLE User’s Guide [55] | Notes on using EAGLE | \\UWEAGLE\TechnicalDataPackage\EAGLEUsersGuide.docx |
| AFSL-2016-29 | UWSDK Notes [56] | Notes on the UWSDK software package | \\UWSDK\TechnicalDataPackage\UWSDKNotes.docx |
| AFSL-2017-01 | Kestrel 5500 User’s Guide [57] | Weather meter manual with Kestrel LiNK | \\AFSL\HowToDocumentation\Kestrel5500Manual.docx |
| AFSL-2017-02 | MAPSS Prototype 1 [58] | Guide on how to use the Prototype 1 gimbal | \\\MAPSS\Research\Prototypes\MAPSS Prototype 1.docx |
| AFSL-2017-03 | sUAS Position Estimation and Fusion in GPS-Degraded and GPS-Denied Environments using an ADS-B Transponder and Local Area Multilateration [59] | Robert Larson’s Master’s Thesis | \\JCATI2015\TechnicalDataPackage\Robert Larson Thesis\ThesisLarsonAsSubmitted.pdf |
| AFSL-2017-04 | Sony a5100 [60] | Sony a5100 Camera Operation guide | \\MAPSS\Research\Sony a5100\Sony a5100.docx |
| AFSL-2017-05 | Modulation Transfer Function Research [61] | MTF Research and Procedure | \\MAPSS\Research\MTF Research\MTF initial research.docx |
| AFSL-2017-06 | RF Spectrum Analyzer Manual [62] | RF Explorer RF Spectrum Analyzer | \\AFSL\HowToDocumentation\RFSpectrumAnalyzerManual.docx |
| AFSL-2017-07 | Pix4D Notes [63] | Notes on Pix4D operation and usage | \\Mapping\TechnicalDataPackage\Pix4D\Pix4DNotes.docx |
| AFSL-2017-08 | INEXA Operational Checklists and Notes [64] | Notes on Insitu’s INEXA system | \\FlightOperations\UAS\CommonDocuments\INEXA\OperationalChecklistsAndNotes.docx |
| AFSL-2017-09 | DJI Phantom 3 Professional Aircraft Flight Manual [65] | DJI Phantom 3 Pro AFM | \\FlightOperations\UAS\Phantom3ProAFSL\Phantom3ProAFSLAircraftFlightManual.docx |
| AFSL-2017-10 | 3DR Solo Aircraft Flight Manual [66] | 3DR Solo AFM | \\FlightOperations\UAS\3DRSoloAFSL\3DRSoloAFSLAircraftFlightManual.docx |
| AFSL-2017-11 | TARS Operations Manual [67] | TARS notes | \\FlightOperations\UAS\TARS\TARSOperationsManual.docx |
| AFSL-2017-12 | Flight Testing an ADS-B Equipped sUAS in GPS-Denied Environments [68] | Aviation 2017 paper | \\JCATI2015\TechnicalDataPackage\ConferencePaper1\MAIN\_ADSB\_flight\_testing\_From\_AIAA.pdf |
| AFSL-2017-13 | Multi Rotor Flight Training Information | Flight training info | \\FlightOperations\Operators\Training\MultiRotorFlightTrainingInformation.docx |
| AFSL-2017-14 | A Database System Architecture for Air-to-Ground UAS Link Characterization [69] | 2018 SciTech paper | \\JCATI2016\TechnicalDataPackage\ConferencePaper\MAIN\_SDRs\_on\_UAS\_From\_AIAA.pdf |
| AFSL-2017-15 | Vulcan Propeller Efficiency Characterization Test [70] | Test plan and results for propulsion wind tunnel test | \\Vulcan\WindTunnelTesting\PropulsionTest\PropulsionTestDocument.docx (on private Perforce server) |
| AFSL-2017-16 | VLP PUCK LiTE (LiDAR) Manual [69] | VLP PUCK LiTE (LiDAR) Manual | \FlightOperations\UAS\CommonDocuments\VelodynePuckLite\PuckLite\_Manual |
| AFSL-2017-17 | Plum Aircraft Flight Manual | Plum aircraft flight manual | \\FlightOperations\UAS\Plum\PlumAircraftFlightManual.docx |
| AFSL-2017-18 | Excelsior Aircraft Flight Manual | Excelsior aircraft flight manual | \\FlightOperations\UAS\Excelsior\ExcelsiorAircraftFlightManual.docx |
| AFSL-2017-19 | MicaSense Aerial Pointing and Stabilization System: Dampening In-Flight Vibrations for Improved Agricultural Imaging [71] | 2017 senior design capstone paper submitted to AIAA SciTech | \\MAPSS\TechnicalDataPackage\ConferencePaper\MAIN\_MAPSS\_From\_AIAA.pdf |
| AFSL-2017-20 | UAS Position Estimation in GPS-Degraded and Denied Environments Via ADS-B and Multilateration Fusion [72] | 2018 SciTech paper | \\JCATI2015\TechnicalDataPackage\ConferencePaper2\MAIN\_TRAPIS\_fusion\_From\_AIAA.pdf |
| AFSL-2017-21 | Visual Anchoring: Orbiting a Target with a UAS Using Vision as the Primary Sensor Modality [73] | 2018 SciTech paper | \\VisualAnchoring\TechnicalDataPackage\ConferencePaper\MAIN\_visual\_anchoring\_paper\_from\_AIAA.pdf |
| AFSL-2017-22 | Generating Multi-Purpose Rendered Environments from Unmanned Aerial System Data [74] | 2018 SciTech paper | \\Mapping\TechnicalDataPackage\ConferencePaper2\_AIAASciTech\MAIN\_3D\_Renders\_From\_UAS\_From\_AIAA.pdf |
| AFSL-2017-23 | UW C++ SDK Notes [75] | Build notes for the UWCpp solution | \\UWCpp\TechnicalDataPackage\UWCpp.docx |
| AFSL-2017-24 | Manufacturing Printed Circuit Boards [76] | Notes how to manufacture PCBs | \\Teaching\aa448\Manufacturing\ManufacturingPCBs.docx |
| AFSL-2018-01 | White Bird Aircraft Flight Manual [77] | White Bird aircraft flight manual | \\FlightOperations\UAS\WhiteBird\WhiteBirdAircraftFlightManual.docx |
| AFSL-2018-02 | Ardupilot for AA441 [78] | Discussion on forking Ardupilot for AA441 | \\Teaching\aa441\TechnicalDataPackage\ArdupilotForAA441.docx |
| AFSL-2018-03 | Notes for BFLY-PGE-23S6M-C 1/1.2" Blackfly PoE GigE Monochrome Camera [79] | Notes for the Flir Blackfly camera | \\FlightOperations\UAS\CommonDocuments\FlirBlackflyGigE\FlirBlackflyGigENotes.docx |
| AFSL-2018-04 | Git and GitHub [80] | Notes on Git and GitHub operation | \\AFSL\ComputingInfo\GitAndGitHub\GitAndGitHub.docx |
| AFSL-2018-05 | Samwise System Integration | Describes components and connections for docking Samwise to Frodo | \\LARAMID\Research\Samwise\_System\_Integration.docx |
| AFSL-2018-06 | Installing Phoenix RC | Instructions for installing the Phoenix RC simulator on lab or personal computers | \\AFSL\HowToDocumentation\Installing\_PhoenixRC.docx |
| AFSL-2018-06 | LAboratory Reconciliation and Information System Developer Guide [81] | Instructions for developers working on the LARI project | \\FlightOperations\Software\LARI\LARIDeveloperGuide.docx |
| AFSL-2018-06 | LAboratory Reconciliation and Information System User Guide [82] | Instructions for installing, configuring, and using LARI | \\FlightOperations\Software\LARI\LARIUserGuide.docx |
| AFSL-2018-06 | LAboratory Reconciliation and Information System Software Requirements Specification [83] | The software requirements specification for LARI | \\FlightOperations\Software\LARI\LARISoftwareSpec.docx |
| AFSL-2018-07 | UAS Operation and Navigation in GPS-Denied Environments Using Multilateration of Aviation Transponders [84] | Conference paper in preparation | \\TRAPIS2\TechnicalDataPackage\ConferencePaper\19\_01\_07\_From\_AIAA.pdf |
| AFSL-2018-08 | Artificial Light Detection as a Method for Poacher Detection from an Unmanned Aerial Vehicle [85] | Paper for HIPPO capstone team | \\HIPPO\TechnicalDataPackage\ConferencePaper\19\_01\_07\_From\_AIAA.pdf |
| AFSL-2018-09 | Design and Development of a Self-Contained Trailing Static Pressure Measurement System Prototype [86] | Paper for TEMPEST capstone team | \\TEMPEST\TechnicalDataPackage\ConferencePaper\19\_01\_07\_From\_AIAA.pdf |
| AFSL-2018-10 | Visual Anchoring: Fixed-Wing UAS Orbit Stabilization About a Visual Anchor Point Without GPS Dependence [87] | Ryan Grimes Masters Thesis | \\VisualAnchoring\TechnicalDataPackage\RyanGrimesThesis\thesisGrimesREVISEDSUBMISSION.pdf |
| AFSL-2018-11 | SolarUAS Aircraft Flight Manual | SolarUAS Aircraft Flight Manual | [\\FlightOperations\UAS\SolarUAS\SolarUASAircraftFlightManual.docx](file:///\\FlightOperations\UAS\SolarUAS\SolarUASAircraftFlightManual.docx) |
| AFSL-2018-12 | Concept of Operations for BVLOS Operation of the PK Prime UAS for Medical Sample Delivery [88] | BVLOS Con-ops document |  |
| AFSL-2018-13 | Modeling the Trajectory of Failed UAVs (TOFU) and the Risk of Unmanned Aircraft Collisions with Humans (RUACH) | Airbus/Altiscope proposal |  |
| AFSL-2018-14 | Development of a Large Scale Aerial Testbed for Varied Field Experiments | PAWR pre-proposal |  |
| AFSL-2019-01 | Project Vision for Trajectory of Failed UAVs (TOFU) | Research vision for TOFU project | [\\RiskAssessment\TechnicalDataPackage\ProjectVision\ProjectVisionTOFU.docx](file:///\\RiskAssessment\TechnicalDataPackage\ProjectVision\ProjectVisionTOFU.docx) |
| AFSL-2019-02 | TOFU Simulator User/Developer Manual | Useful for navigating, understanding, and using the simulator | [\\RiskAssessment\Matlab\TOFU\_simulator\TOFU\_simulator\_manual.docx](file:///\\RiskAssessment\Matlab\TOFU_simulator\TOFU_simulator_manual.docx) |

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