

F' Flight Software Workshop Agenda
Day 1 - Monday, September 9, 2019

Type	Topic/Activity	Presenter	Time	Duration
Presentation	01 F' Introduction	T. Canham	1:00	60
Break				15
Exercise	02 Lab project system requirements	T. Canham		
	Lab project component breakdown			
	Write F' component and XML implementations for lab project	M. Starch		
	FSW Implementation in F'			
	Component level implementation			
	Filling in component handlers			
	Sending telemetry, events			
	Using parameter values			
	Directly invoking ports			
	Deployment level implementation			

Day 2 - Tuesday, September 10, 2019

Type	Topic/Activity	Presenter	Time	Duration
Presentation	03 FSW Design	M. Starch	1:00	60
	FSW system modeling in F' (Types, ports, components, topology definitions)			
	Data types, interfaces			
	Commands, telemetry events, parameters and data products			
	Concurrency, initialization, memory allocation			
	OS abstraction layer (message queues, mutex, tasks, file system)			
	Interface design patterns			
	Serializing and deserializing data			
Break				15
Exercise	Implement components and topology for lab project	T. Canham		
Homework	Finish Lab implementation	T. Canham		
Presentation	05 Ground System	M. Starch		