

**Information about the Applicant**

<b>Company Name</b>	Schweitzer Engineering Laboratories, Inc.
<b>Grantee</b>	Pat Schacher
<b>Address</b>	2350 NE Hopkins Court
<b>City, State, Zip</b>	Pullman, WA 99163
<b>Job Number</b>	schw0048
<b>Model</b>	SEL-3022
<b>FCC ID</b>	R34SEL3X22
<b>Agent</b>	Northwest EMC, Inc.
<b>Approval Type</b>	Original
<b>Equipment Class</b>	DTS Digital Transmission System
<b>Rule Part</b>	15.247DSSS

**Overview**

Model SEL-3022 transmitter, FCC ID: R34SEL3X22, is a spread spectrum transmitter that utilizes direct sequence modulation techniques. This transmitter is compliant with IEEE 802.11b specifications, and will be used only as a mobile transmitter. The SEL-3022 is an EIA-232 to IEEE 802.11b, or WiFi, encryption device that adds strong encryption and authentication features to the data sent across wireless ports. The EUT can be configured with either one of two different antennas. The antenna connector is a reverse polarity SMA connector that satisfies the requirements of 47 CFR 15.203. The technical reports and exhibits demonstrate compliance with FCC rules 47 CFR 15.247.

**Recommendation**

All items have been resolved and completed to my satisfaction; therefore I recommend this application for approval.

**Signature**

6/27/2005

Dave Tolman, TCB Committee

<b>Findings</b>	
<b>Specification</b>	<b>Finding</b>
47 Cfr 15.19	Labeling
<b>Finding</b>	The provided exhibit was too small for reading.
<b>Resolution</b>	The client has corrected the deficiency.

<b>Findings</b>	
<b>Specification</b>	<b>Finding</b>
Required Exhibit	Test Setup Photos
<b>Finding</b>	Test setup photos were not provided as a separate exhibit
<b>Resolution</b>	The client has corrected the deficiency.

<b>Opinions</b>	
<b>Specification Requirements</b>	<b>Description</b>
47 Cfr 2.1033(b)(3)	Installation guide, operating instructions, user manual
<b>Opinion</b>	The device meets the requirements of the rule.
<b>Discussion</b>	The client has provided the necessary exhibit.
<b>Reference</b>	Users Manual.pdf

<b>Specification Requirements</b>	<b>Description</b>
47 Cfr 2.1033(b)(4)	Operational description
<b>Opinion</b>	The device meets the requirements of the rule.
<b>Discussion</b>	The client has provided the necessary exhibit.
<b>Reference</b>	Operational Description.pdf

<b>Specification Requirements</b>	<b>Description</b>
47 Cfr 2.1033(b)(5)	Frequency block diagram and Schematic diagram
<b>Opinion</b>	The device meets the requirements of the rule.
<b>Discussion</b>	The client has provided the necessary exhibit.
<b>Reference</b>	Frequency Block Diagram.pdf, Schematics.pdf

<b>Specification Requirements</b>	<b>Description</b>
47 cfr 2.1033(b)(6)	Test Report
<b>Opinion</b>	The device meets the requirements of the rule.
<b>Discussion</b>	The client has provided the necessary exhibit.
<b>Reference</b>	Report-schw0048.pdf

<b>Specification Requirements</b>	<b>Description</b>
47 Cfr 2.1033(b)(6)	Conversions showing how the test results were achieved
<b>Opinion</b>	The device meets the requirements of the rule.
<b>Discussion</b>	The client has provided the necessary exhibit.
<b>Reference</b>	Report-schw0048.pdf

Specification Requirements	Description
47 Cfr 2.1033(b)(7)	Internal and external photos
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Internal Photos.pdf, External Photos.pdf

Specification Requirements	Description
47 Cfr 1.1307(b),2.1091,2.1093	RF Exposure Hazzard
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	RF Exposure.pdf

Specification Requirements	Description
47 Cfr 15.19	Labeling
Opinion	The device meets the requirements of the rule.
Discussion	A more legible sample of the label was provided.
Reference	External Photos.pdf, Label.pdf

Specification Requirements	Description
47 Cfr 15.21	Information for user
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Users Manual.pdf

Specification Requirements	Description
47 Cfr 15.27	Special accessories
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-schw0048.pdf

Specification Requirements	Description
47 Cfr 15.33	Frequency range of tests
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-schw0048.pdf

Specification Requirements	Description
47 Cfr 15.35	Measurement detectors
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-schw0048.pdf

<b>Specification Requirements</b>	<b>Description</b>
<b>ANSI C63.4 EUT Ports</b>	All EUT ports populated,emissions maximized,Antenna height adjusted
<b>Opinion</b>	The device meets the requirements of the rule.
<b>Discussion</b>	The client has provided the necessary exhibit.
<b>Reference</b>	Report-schw0048.pdf

<b>Specification Requirements</b>	<b>Description</b>
<b>47 Cfr 15.203</b>	Antenna Requirements
<b>Opinion</b>	The device meets the requirements of the rule.
<b>Discussion</b>	The client has provided the necessary exhibit.
<b>Reference</b>	Antenna Info 1.pdf, Antenna Info 2.pdf,Antenna Info 3.pdf

<b>Specification Requirements</b>	<b>Description</b>
<b>47 Cfr 15.205</b>	Restricted bands
<b>Opinion</b>	The device meets the requirements of the rule.
<b>Discussion</b>	The client has provided the necessary exhibit.
<b>Reference</b>	Report-schw0048.pdf

<b>Specification Requirements</b>	<b>Description</b>
<b>47 Cfr 15.207</b>	Power line Conducted emissions
<b>Opinion</b>	Not applicable
<b>Discussion</b>	The client has provided the necessary exhibit.
<b>Reference</b>	Report-schw0048.pdf

<b>Specification Requirements</b>	<b>Description</b>
<b>47 Cfr 15.209</b>	Spurious Emissions
<b>Opinion</b>	The device meets the requirements of the rule.
<b>Discussion</b>	The client has provided the necessary exhibit.
<b>Reference</b>	Report-schw0048.pdf

<b>Specification Requirements</b>	<b>Description</b>
<b>47 cfr 15.247</b>	Operation within specified bands
<b>Opinion</b>	The device meets the requirements of the rule.
<b>Discussion</b>	The client has provided the necessary exhibit.
<b>Reference</b>	Report-schw0048.pdf

<b>Specification Requirements</b>	<b>Description</b>
<b>47 Cfr 15.247(a)</b>	Occupied Bandwidth
<b>Opinion</b>	The device meets the requirements of the rule.
<b>Discussion</b>	The client has provided the necessary exhibit.
<b>Reference</b>	Report-schw0048.pdf

Specification Requirements	Description
47 Cfr 15.247(b)	Output Power
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-schw0048.pdf

Specification Requirements	Description
47 Cfr 15.247(d)	Band Edge Compliance
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-schw0048.pdf

Specification Requirements	Description
47 Cfr 15.247(d)	Spurious Conducted Emissions
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-schw0048.pdf

Specification Requirements	Description
47 Cfr 15.247(d)	Spurious Radiated Emissions
Opinion	The device meets the requirements of the rule.
Discussion	The data sheet provided.
Reference	Report-schw0048.pdf

Specification Requirements	Description
47 Cfr 15.247(e)	Power Spectral Density
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report-schw0048.pdf