

Exhibit 1

1. Introduction

By the instant application (“Application”), ContiTech USA, LLC (“ContiTech”) requests that the Commission grant a 2 year conventional experimental license to permit ContiTech to operate the facilities specified in the instant application.

2. Purpose of the Operation

In support of industrial, mining and bulk material transport applications, ContiTech seeks an experimental license to develop conveyor belt load monitoring solutions at the defined pilot location(s) outlined in the Application. The primary goal of this pilot project is to demonstrate and test possible sensing and processing configurations for improving the conveying efficiencies for mining companies, in order to support the future deployment of production grade systems. The hardware and software components necessary for accomplishing the goals of this pilot project have been fully defined through internal R&D projects. One hardware component is a current production automotive 77 GHz radar, which is specified in the instant Application.

The experiment will involve the installation of fixed radars at a position ~3 m above fixed conveyor belt line(s) pointing down towards the conveyor belt line. The radars will be angled down towards the conveyor belt to monitor the cross sectional area made by the material being conveyed. The purpose of the sensor is to determine an instantaneous cross section of the material being conveyed and also monitor the longitudinal belt displacement in order to determine the volume of the material being carried by the conveyor belt during its operation.

A waiver of the Station ID requirements of 47 CFR §5.115(a) is respectfully requested.

3. Directionality/Orientation

- | | |
|--|-------------------------------|
| a) Width of beam in degrees at the half-power point: | 20° Elevation
150° Azimuth |
| b) Orientation in horizontal plane
(degrees from True North) | Various (directed to ground) |
| c) Orientation in vertical plane (degrees from horizontal)
account for conveyor grade | 90 degrees +/- 6 degrees to |

Note: Sensor should be perpendicular to conveyor belt aligned across transverse dimension

4. Interference Mitigation

ContiTech is well aware of its obligations under Part 5 of the Commission's rules to avoid interference to co-channel operations in non-experimental services and will take all steps to ensure compliance with this obligation. ContiTech advises that the following will be available by wireless telephone and will act as "stop buzzers" if any issues regarding interference arise during testing.

Most testing will be limited to ground-based operation with the emitting antenna generally located no higher than 10 feet from the ground and the elevation of the main beam not exceeding +10 degrees elevation. Other tests, from a tower, will have the antenna directed down toward the ground.

5. Stop Buzzer

The following will be available by wireless telephone and will act as the "stop buzzer" if any issues arise during testing:

PRIMARY:	Bob Leib 1-937-707-7769
SECONDARY:	Jack Wallace 1-937-707-7770