

Searching

Words and Music by Mary Amato

THE SONG

Bb
Sliver on a dial
 Gm
That’s where you hide
 Cm
I’m crazy to think that I could
 F
tune you in this time.

 Bb
You’re light years away
 Gm
if you exist.
 Cm
I’d shut down this dream and go home
 F F/D7
But I can’t resist.

*CHORUS

 Eb F
I’m sifting through the static
 Bb Gm
to find you.
Eb F
Looking for a pattern
 Bb D7
That defines you.
Cm F Bb/F7
Maybe I’ll get lucky tonight

VERSE

Bb
Patiently now
 Gm
I turn my ear.
Cm
Steer a beam of attention
 F
And hope that I hear.

VERSE

 Bb
But everything hums—
 Gm
A chaos of noise
 Cm
That drowns out the signal I want
 F F/D7
The one that carries your voice

THE SCIENCE

Have you ever searched for a radio station on a radio? What you’re actually doing is sifting through radio waves, a specific type of wave on the electromagnetic spectrum. Radio waves vibrate at different frequencies, so by tuning a radio receiver – or turning the dial on your radio – you can pick up the signal being sent out on that frequency.

The odds are high that some other earth-like planet must exist. Astronomers now know that The Milky Way has hundreds of billions of planets, and that’s just one galaxy in a universe full of galaxies. The problem is that even if we discover that a planet like ours exists, the planet will be too far away for us to ever travel to it.

Astronomers aren’t just looking at the sky; they’re also listening, using equipment to try and tune in on frequencies that might indicate intelligent life is out there, waiting to be discovered.

Astronomers use enormous radio receivers—signal-gathering bowls hundreds of feet across—tilting them toward this star and that. What they try to listen for are patterns in frequencies that would indicate something special. Oftentimes, it comes up only as static. Is it actually static that they are hearing? Or just cosmic objects making noise that doesn’t interest them?

The task of finding intelligent life is made even more difficult because there is so much noise in the universe. Everything in the universe vibrates on a microscopic level, even things that look like they are standing still. The vibrations are so miniscule, that you can’t tell they are there... unless you have a radio telescope. Because the vibration of everything gives off a frequency, astronomers hear the noise the stars make when they vibrate. They hear the noise the planets make when they vibrate. They could hear the sound of your desk, if they pointed their radio telescopes at it, because it is also vibrating.

REPEAT CHORUS

BRIDGE

D
 Like trying to find a speck of gold
 Eb
 In a sea of sand and
 D Eb
 I could dig forever just to come up
 F7b9 /D
 Empty handed.

Bb
 I'll send this wave
 Gm
 Out into the blue
 Cm
 Just on the chance that you're there
 F
 Searching for me, too.
 Cm F
 Maybe we'll get lucky
 Cm F
 Maybe we'll get lucky
 Cm F D#Madd 9/C#Madd9/Bb
 Baby we'll get lucky one night.

There are currently 16 active radio telescopes, with at least one on each continent except Antarctica.

Theoretically, every radio signal we transmit—every song we send out—has the potential to be “picked up” by intelligent life out there who might be doing exactly what we’re doing: listening.

--Thanks to science writer Ivan Amato for the astronomy notes.