WAMA Ground Run-Up Monitoring Help Page

Contents

WAMA Ground Run-Up Website Overview

The LAWA West Aircraft Maintenance Area (WAMA) Ground Run-Up (GRU) website allows the public to view live and previous days' noise data and photos through a simple, user-friendly page. Noise data and photos are transmitted to this site directly from the LAWA WAMA noise monitoring terminal at LAX. Engine run-ups will be directly displayed on the website as potential noise events. The site allows users to visually link aircraft to corresponding events. The noise monitoring terminal (with microphone) and remote camera continuously send, respectively, one second noise data and photos taken at one minute intervals to a webserver hosting this page.. Recorded noise and photos are available for public viewing for thirty days after their initial display.

Live Mode of Ground Run-up Website
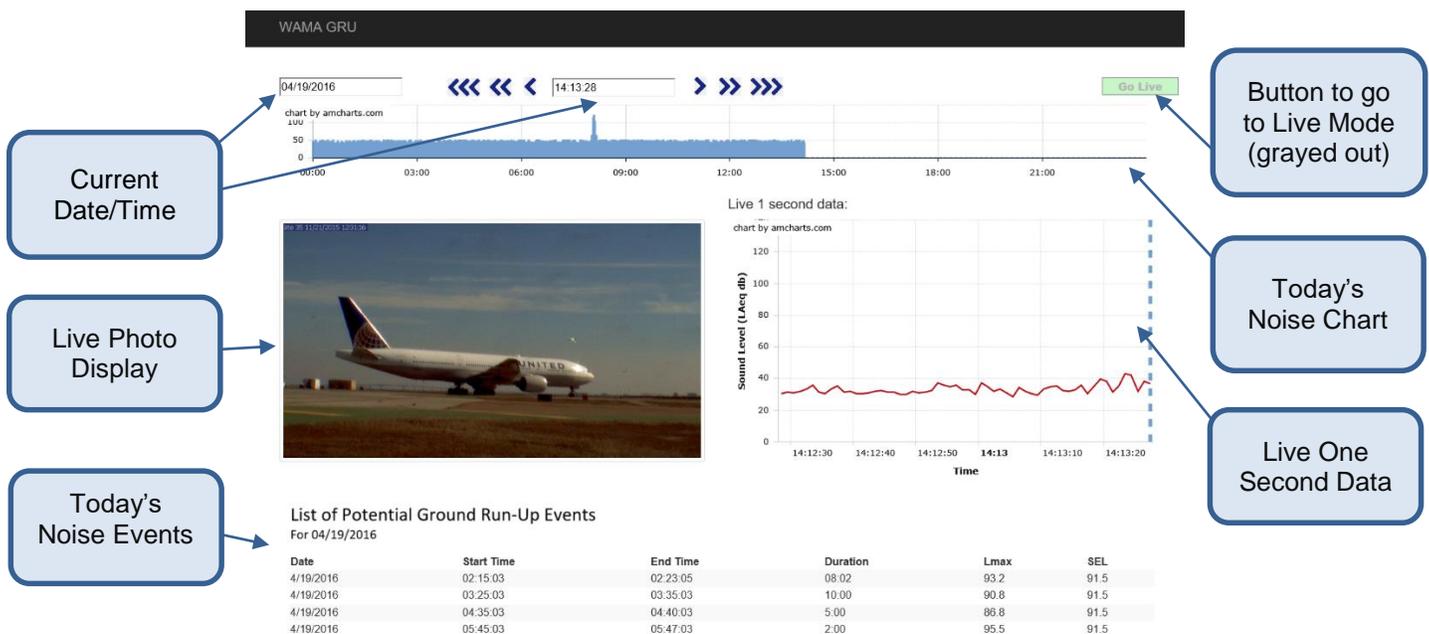
Figure 1 WAMA GRU Website Live Mode Display

The WAMA Ground Run-Up website can be viewed by visiting wama.airportnetwork.com with any web browser. By default, the page demonstrates live data for its initial display, as shown in Figure 1. In live mode current noise data, photos, and events are easily viewed.

Live Mode vs. Historic Mode

When the website first appears, it is in Live Mode, as shown in Figure 1. This means that you are viewing the most current noise and photo available. In Historic Mode, you are viewing past noise and photos. To leave Live Mode and enter Historic Mode, you can do one of the following actions:

- Type in a previous Date or previous Time in the Date/Time boxes.
- Click on the long blue graph at a time in the current day that you wish to view.
- Click on one of the "Events" in the list, if any (explained below).

Once in Historic Mode, you can go back to Live Mode by clicking on the "Go Live" button in the upper-right corner of the screen. This button is "grayed-out" when you are in Live Mode, and available to select when you are in Historic Mode. Historic Mode is shown in Figure 2.

## Historic Mode of Ground Run-Up Website
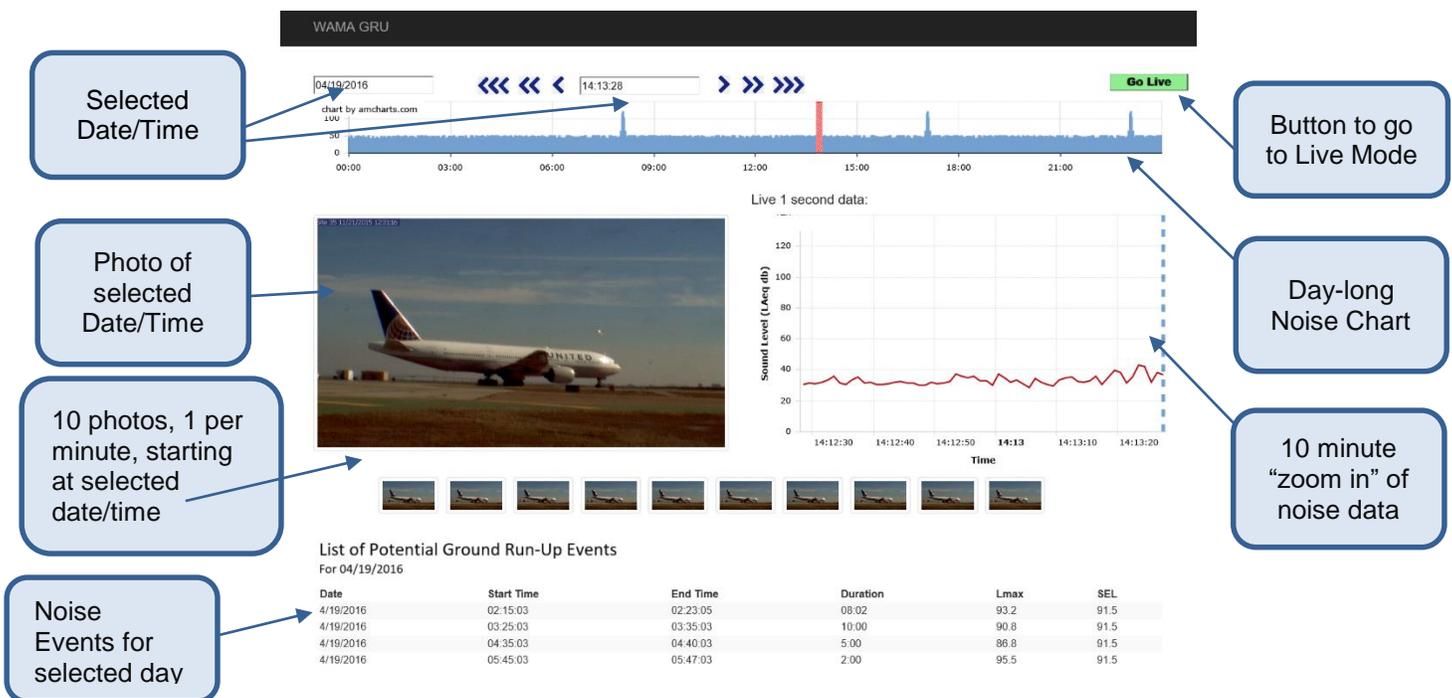
Figure 2 WAMA GRU Website Historic Mode Display

The wide blue graph at the top of the page (in both modes) shows the noise levels throughout the day. If viewing a day before the current day, this graph should span the entire width of the page. If viewing the current day, it may only be partially filled in as the day is not yet complete.

The Live One Second Data graph in the upper right corner demonstrates live noise data by the second. The present time is represented by the blue dotted line on the right side of the graph.

The red vertical line can be moved across the graph with the user's mouse. It shows noise in decibels and a time and date stamp.
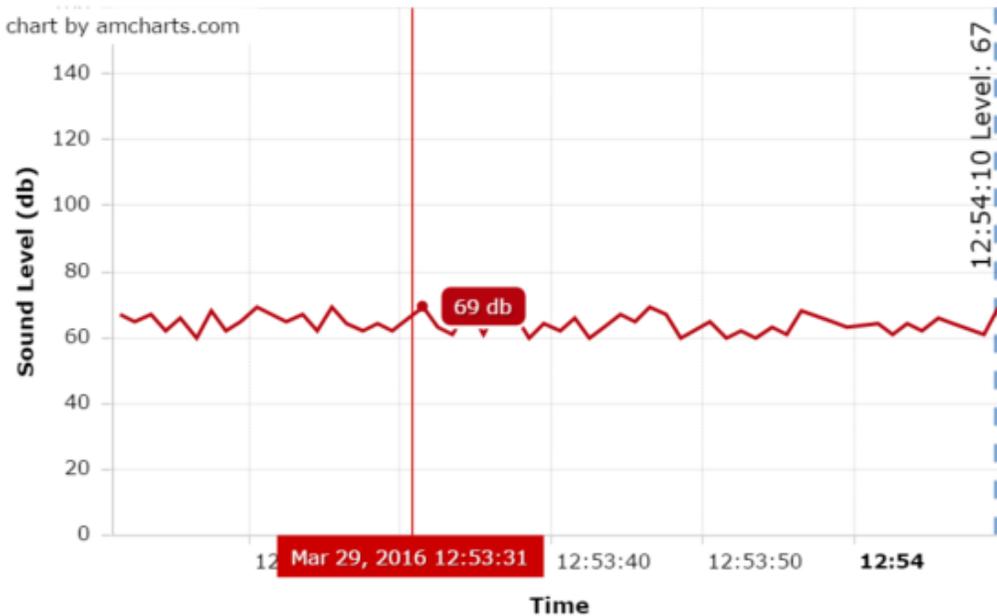
Figure 3 Live 1 second data

In Live Mode, this graph represents the most recent 10 minutes of noise data. In Historic Mode, it represents 10 minutes of data starting at the selected date/time. Note that in historic mode the day-long graph highlights the 10-minute window selected.

Live Mode features a current photo taken of the blast fence at the LAWA run-up site. There may be an aircraft in the photo performing a run-up. Sometimes you may see an aircraft further in the background, likely not involved in making run-up noise, as in the photo in Figure 4 below. Photos are taken and updated on the site every minute for the Live Photo Display. A date and timestamp will be shown in the corner of the photo. There is no need to refresh the page to get the latest photo. In Live Mode, the webpage will refresh automatically to show the most recent picture.

Figure 4 Live Photo Display

At the bottom of the page there is a section labeled "List of Potential Ground Run-Up Events", as detailed in Figure 5. By default, i.e., when in "Live" mode, the Events section shows the day's events that have occurred up to the present moment. A noise event is defined as having an A-weight decibel level of at least a certain decibel level (usually around 83db) for at least a minute and then dropping below that level for at least 15 seconds (the number of decibels required to signify as a run-up, and the number of minutes/seconds used to trigger it, may changes as it is tuned by LAX staff to ensure that actual run-ups are triggered as events and non-run-ups are not. These events are displayed along with the event date, event start time, event end time, duration of the event in minutes, the Lmax (the maximum noise level during the event), and the SEL (the Sound Exposure Level, an indicator of total sound energy integrated over the duration of the event).

List of Potential Ground Run-Up Events
For 04/19/2016

Date	Start Time	End Time	Duration	Lmax	SEL
4/19/2016	02:15:03	02:23:05	08:02	93.2	91.5
4/19/2016	03:25:03	03:35:03	10:00	90.8	91.5
4/19/2016	04:35:03	04:40:03	5:00	86.8	91.5
4/19/2016	05:45:03	05:47:03	2:00	95.5	91.5

Figure 5 Events

When an event is selected, the webpage leaves "Live" Mode and goes into "Historic Mode" and jumps to the date/time of the start an event. Clicking on an event the list changes the screen in the exact same manner as typing in the date and time of the start of the event, i.e., the one-second noise graph changes to show 10 minutes of noise data beginning at the selected time, the large photo changes to the photo nearest the selected time, and the 10 thumbnail photos show 1 photo per minute starting at the selected time.

Ways to change Date and Time

The current date and time are located in the top section of the screen. The user can view previous days' data by changing the date and time. Once a past date/time is selected, the entire page will change to demonstrate data reflecting that day/time. Any time within the past 30 days can be viewed.

The date can be selected by clicking the box on the top left where a calendar appears and the date can be chosen, or typed in by hand. The time can be changed by clicking the time box and scrolling until the desired time is selected, or typed in by hand. These date and time controls are depicted in Figure 6. The Present Day Noise chart at the top of the screen will adjust to reflect the chosen date and time.
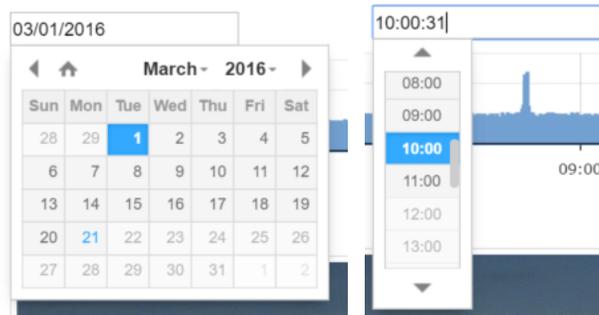

Figure 6 Date and Time Controls

In addition, there are arrows to the left and to the right of the Time box that perform the following functions:

- Three left arrows: Jump back 30 minutes
- Two left arrows: Jump back 5 minutes
- One left arrow: Jump back 1 minute
- One right arrow: Jump ahead 1 minute
- Two right arrows: Jump ahead 5 minutes
- Three right arrows: Jump ahead 30 minutes

As noted above, when the user changes the date and time, the webpage will change to Historic Mode (if not already in Historic Mode), which will alter the photos, 1-second noise graph, and (if the "date" changes, i.e., not just the "time") change the list of events based on the selected date.

The Events will always change to match the selected date. When a previous date has been selected, the Events section at the bottom of the page will populate with events from that given day.