

DRAFT 1

The Search for Terrestrial Intelligence

Special Instruction (no gimmicks):

Welcome to today's car rallye, which is a coursemarker gimmick rallye. A prearranged course has been designed which you will drive while applying what you have read in these General Instructions. Read all instructions very carefully. If you have questions please feel free to ask the rallyemaster at the start prior to beginning the rallye.

The theme of this rallye is based on the delivery of the refractor telescope to Lick Observatory in 1866. The Observatory was built by the James Lick trust. Any knowledge or expertise of the Lick Observatory (or astronomy in general), however, in no way enables you to perform better on the rallye than those with no knowledge of it. The information you need to successfully run this rallye is contained in these General Instructions, as well as the Route Instructions, Supplementary Instructions, Special Instructions, and the California Vehicle Code. At the end of the rallye, when you reach the Pizza Parlor, where most rallyes end, you will receive an answer sheet that will explain the gimmicks and you can see how you did on your trek up Mt. Hamilton.

In the good old days, a coursemarker-gimmick rallye used paper plates used as coursemarkers (similar to one at the start) hung on poles along the route to help you make your way through the route instructions. Today's rallye (which we're calling a GPS Coursemarker Rallye) is a bit different – you'll use a website on your phone to tell you when you encounter coursemarkers based on your GPS location. See the attached information about accessing the site and getting your phone set up to use it (when you register at the start, the rallyemaster will check that you have everything ready to go). Aside from the fact that they appear on your phone, you can treat these GPS coursemarkers exactly as you would normal, physical coursemarkers. Since it's the first time using this app, it's a bit of an experiment, so please reach out to the rallyemasters if anything seems to be amiss and we'll appreciate any feedback you have on this format!

This rallye will run entirely within the local area and will end at the Mountain Mike's Pizza Parlor at Cuesta and Miramonte in Mountain View. A few short traverses (SI Instructions with no gimmicks) are used to take you to different areas of the route as well as to the Pizza Parlor at the end of the rallye. There are no gimmicks (tricks) in this section titled Special Instructions.

End SI.

General Instructions (also referred to as GIs)

DEFINITIONS:

at: in each route or supp instruction using the word “at”, everything following “at” must appear on the sign where you are instructed to turn.

DEFINITIONS (continued):

Ch: a chance to turn in the direction indicated at a named road.

Opp: an opportunity to turn ONTO the road by name.

onto: onto the road by name. Stay onto a road by name, even if you must U to do so, until instructed off. **Named roads can only be named with English alphabet characters**

NLORBN: no longer onto road by name; you are taken off the road by name.

U: a one hundred eighty degree reversal of your direction of travel. Make Us where legal and safe but consider them made where instructed.

enter: stop at the indicated checkpoint and hand your scoresheet to the rallye personnel.

complete: execute or delete

delete: does not exist

R: make a turn to the right approximately 90 degrees

L: make a turn to the left approximately 90 degrees

turn: change of direction

stop: a red and white sign with the word “STOP” on it.

CM: coursemarker

CP: checkpoint

CS: Continue straight as possible at the road indicated

Intersection: the meeting of two **or more** differently named roads

T: the meeting of two named roads shaped like a T approached up the stem. L at uninstructed T's.

DRI: delete the route instruction you are currently working on

CRI: continue with the RI indicated, and delete any other RIs that may be in effect.

signs: any single surface, only government erected street signs and traffic control signs and CP related signs erected for today's rallye are considered signs.

DG: delete the gimmick in the general instructions that caused you to reach this CM.

DS: delete any SUPP instructions currently in effect.

DZ: delete the ZodiAC catalogue effect that got you here or that is in effect.

character: An arabic numeral (1,2,3,...) or letter in the english alphabet

word: One or more characters~~English letters~~ set off by spaces or punctuation.

on course: you are doing just fine. Execute an “on course” by taking a deep breath and saying “ah it is fun to be traveling in the wagon.”

faraway object: a character on a sign

astronomical object: an object listed in the ZodiAC Catalogue of Astronomical Objects (attached) and observed by executing a CS at a sign with its identifier.

Pick up the eyepiece: When instructed, you no longer see words as inverted

Inverted: flipped upside down on signs

ORDER OF PRECEDENCE:

The Order of Precedence is listed below, decreasing in precedence as you move down the list. When two or more instructions of different precedence are in effect, work on the instruction of higher/highest precedence.

1. California Vehicle Code: OBEY THE LAW. Do not break any laws to follow any other instructions. You may work on other instructions while following the Vehicle Code. The police have been notified about the route and will be patrolling the route. DO NOT SPEED. This rallye is not a race, it is a mind game on wheels.

2. Special Instructions (SIs): Highest order of precedence other than the law. There are no gimmicks on SIs. When instructed, always follow the SIs. Do not work on any other instruction when SIs are in effect.

3. General Instructions (GIs): General Instructions are contained in the five pages labeled General Instructions which you received at the start. They are always in effect, unless deleted.

4. Catalogue of ZodiAC Instructions: The instructions listed in the catalogue of ZodiAC Instructions. They come into and go out of effect as instructed. When you see the identifiers for each effect.

5. Supplementary Instructions (SUPPs): Supps are numbered instructions with numbered part(s) that appear on the SUPP/SI pages or are shown to you at a Checkpoint. Once you execute a supp it is deleted, and its corresponding CM no longer exists (i.e. if you encounter a CM for a second time on the route ignore it). Supps received at CPs come into effect upon receipt and are deleted upon execution. When a supp has more than one part, complete the parts of the supp in ascending numerical order. When two or more supps are in effect at the same time, complete all parts of the supp that came into effect first before completing the parts of the next supp that came into effect.

6. Route Instructions (RIs): RIs are numbered instructions on the Route Instruction page. Always work on the lowest numbered uncompleted RI. Once you execute an RI, it no longer exists.

COURSEMARKERS:

KIT NEEDS TO DESCRIBE CMs.... There is a good CM at the start. When you see a CM, record it on your score sheet by writing the number on the CM next to the corresponding letter on your scoresheet. Once you record a CM, bring into effect and complete any corresponding Supps or SIs on your SUPP/SI page. When you are working on supps and record a coursemarker, delete the supps you were working on and begin working on the supps from the CM just recorded. Once a CM is recorded on your scoresheet it does not exist. [ER1]

CHECKPOINTS will be identified by a sign with a ✓. similar to the one at the start. The CP will be on the same side of the street as the direction you are traveling. When you encounter a CP, enter the CP by telling the personnel which RI you are working on and hand the CP personnel

your score sheet. You may receive instructions at a CP from CP personnel. The CP sign at the start is an example only.

THE TREK UP MT. HAMILTON

Welcome to today's car rallye. About 25 miles due east from the start of today's rallye, on the summit of Mt. Hamilton, are the domes of Lick Observatory, the first permanently occupied mountain-top observatory in the world, which you may be able to see at some points along today's route. The observatory was built as a monument to James Lick (after he was talked out of his initial idea of building a pyramid to himself larger than the one in Giza, Egypt in downtown San Francisco). James Lick made his fortunes as a cabinet maker and piano builder and built several properties in the bay area, including a hotel, mansion, and a saw mill considered the finest in the country.

Preparing for Today's Journey

Today, you are stepping back in time to December 27, 1886. You are a member of the crew that will deliver by horse and wagon a 36" refractor lens and telescope assembly for placement in one of the domes at Lick Observatory. This massive, 12-ton refractor was the largest telescope of its kind in the world at the time. For help on your journey, be sure to pick up Captain Richard Floyd, the president of Lick's trust, who is staying at Lick's hotel at Montgomery. Captain Floyd is in a hurry to complete the important delivery and convinces you to skip Church. When you see James along the route, he'll want to join you on this journey as well, but will need you to drop him off at Saw Mill to attend to his business. The large lens, which is being fabricated by Alvan Clark & Sons, creates magnified images by gathering and bending light rays, though in doing so it inverts the images of all faraway objects unless an eyepiece is used to set things right-side-up. Clark has agreed to have their lens along with the telescope assembly waiting for you to load ~~on at the park on the corner of Fairmont just past and Bush.~~ The lens can be easily damaged, so you'll need to avoid speed bumps while you're carrying it. When you see Clark on the route, pay homage to him by turning right at the street named for him.

Delivering the Refractor Lens to Lick Observatory

When your cargo is loaded in your wagon, you are ready to begin hauling it up the mountain after you complete RI 23, finding yourself onto Mt. Hamilton Road. To reach the 4265 FT summit, you navigate your horse and wagon up this perilous, newly-constructed mountain road, taking no chances to avoid damaging this fragile scientific equipment. As you wind your way up the mountain and view the lush Santa Clara Valley below you think about what this magnificent piece of equipment will discover in the heavens, though never imagining that in 1969 Lick Observatory would successfully bounce a laser off a target left on the moon by Apollo 11

astronaut Buzz Aldrin, to accurately measure its distance, 238,855 miles from the earth. Immediately upon reaching the summit, you unload the telescope to the warm praise of Floyd and Lick, who assure you you'll be greatly rewarded for your careful efforts – you know you're finally onto Easy St after a perilous journey!

The ZodiAC Catalogue

When you complete RI 30, you will finally have the telescope, lens , and eyepiece installed on the mountaintop and are ready to begin observing the astronomical objects listed in the attached ZodiAC Catalogue of Astronomical Objects (but be wary of the effect these objects will have on those who view them!). In doing so, you will contribute to a long history of significant research at the observatory, including the discovery of several moons of Jupiter, the emission spectra and astrophysical jets of galactic nuclei, numerous extrasolar planets, and the efforts at imaging the entire night sky in search of extraterrestrial intelligence.

The ZodiAC Catalogue of Astronomical Objects

Identifier Object	Effect on observer
Starlite	You will see Starlite when driving on Linda Vista. Because the dim starlite makes it difficult to read, only the first word appears on street naming signs. This effect lasts until you approach the intersection of San Lucas and San Lucas or you see a CM with the number 32 on it. When this effect is no longer in effect, you will see all the words that exist on a sign.
Stardust	Seeing stardust has you thinking about the complex nuclear reactions that fuel stars. After you see stardust, the first CM you see splits in half vertically and you record both halves (fortunately, this only happens one time).
Gemini	When you first observe the twins of Gemini, they leave you with double vision, with all characters on coursemarkers repeated. Fortunately, it is a short-lived effect and resolves after executing two RIs.
Moon	On August 1, 1969, a laser was shot to the moon from Lick Observatory and found the distance to the moon was 238,855 miles to the moon. When you see Moon on the route, record 1969 next to the letter Z on your scoresheet.
Moon Beam	In the 1969 lunar ranging experiment conducted by Lick Observatory, a laser beam was bounced off a retroreflector placed on the moon by Apollo 11 astronauts, measuring its distance from the earth with centimeter precision. When you see Moon Beam on the route, record 11 next to the letter Y on your scoresheet.
M 13	Seeing the Hercules Cluster brings you back to your days of studying Greek mythology, and makes you want to turn R at Olympus whenever you see it.
M 87	The bright blue jet emitted by the supermassive black hole at the center of this galaxy (first discovered by Lick Observatory astronomers!) is so brilliant it has a blinding effect, rendering you unable to see your RI page.
NGC 224	The dizzying effect of the impressive spiral of the Andromeda galaxy causes you to lose sense of direction and make a 180-degree turn.
HR 2061	Observing Betelgeuse gives you triple vision, rendering all characters on coursemarkers repeated three times. Fortunately, this is a short-lived effect and resolves after executing three RIs. Just don't say it three times.
GC 25100	Seeing the teapot-shaped asterism this star is a part of makes you thirsty, so be sure to ask the next CP personnel you encounter for some tea.

GC 15185	Part of the big dipper, seeing this star reminds you that you need a new ladle for your soup, so be sure to ask the next CP personnel you encounter to lend you one.
Wilkie Way	Not quite the Milky Way, but close enough – gives you a craving for chocolate, so you should ask rallye personnel for some when you reach the finish.
ZodiAC	Seeing the zodiac has you wondering about your fate, making you want to ask CP personnel for your horoscope when you see them.
Polaris	Finding the north star gives you a sense of direction, allowing you to see North and its abbreviations to exist on signs.
Sunshine	Since you usually work at night for your astronomical observations, you're so happy to get some sunshine that you draw a happy face next to the driver's name on your scoresheet when you see sunshine.