sample\_rock rover0 rover0store waypoint3 (1)

communicate\_rock\_data rover0 general waypoint3 waypoint3 waypoint0 (1)

drop rover0 rover0store (1)

calibrate rover0 camera0 objective1 waypoint3 (1)

navigate rover0 waypoint3 waypoint1 (1)

navigate rover0 waypoint1 waypoint2 (1)

sample\_soil rover0 rover0store waypoint2 (1)

communicate\_soil\_data rover0 general waypoint2 waypoint2 waypoint0 (1)

take\_image rover0 waypoint2 objective0 camera0 high\_res (1)

calibrate rover0 camera0 objective1 waypoint2 (1)

take\_image rover0 waypoint2 objective1 camera0 high\_res (1)

communicate\_image\_data rover0 general objective1 high\_res waypoint2 waypoint0 (1)

communicate\_image\_data rover0 general objective0 high\_res waypoint2 waypoint0 (1)

|  |  |
| --- | --- |
| Shape | Definition |
|  | Rover Current Position |
|  | Soil Sample |
|  | Rock Sample |
|  | Waypoint (position) |
|  | Rover Pathway |
|  | Position Visibility |
|  | Lander |
|  | Take Image Objective |

[[(calibrated ?i ?r)], [(equipped\_for\_soil\_analysis ?x)], [(full ?y)], [(not (channel\_free ?l))], [(calibration\_target ?i ?t)]]

ONLINE EXPLANATION

sample\_rock rover0 rover0store waypoint3 (1)

communicate\_rock\_data rover0 general waypoint3 waypoint3 waypoint0 (1)

[PRECONDITION] ## (full ?y) ##

drop rover0 rover0store (1) drop rover0 rover0store (1)

[PRECONDITION] ## (calibration\_target ?i ?t) ##

calibrate rover0 camera0 objective1 waypoint3 (1)

calibrate rover0 camera0 objective1 waypoint3 (1)

navigate rover0 waypoint3 waypoint1 (1)

navigate rover0 waypoint1 waypoint2 (1)

[PRECONDITION] ## (equipped\_for\_soil\_analysis ?x) ##

sample\_soil rover0 rover0store waypoint2 (1)

sample\_soil rover0 rover0store waypoint2 (1)

communicate\_soil\_data rover0 general waypoint2 waypoint2 waypoint0 (1)

[PRECONDITION] ## (calibrated ?i ?r) ##

take\_image rover0 waypoint2 objective0 camera0 high\_res (1)

take\_image rover0 waypoint2 objective0 camera0 high\_res (1)

calibrate rover0 camera0 objective1 waypoint2 (1)

take\_image rover0 waypoint2 objective1 camera0 high\_res (1)

[DELETE\_EFFECT] ## (not (channel\_free ?l)) ##

communicate\_image\_data rover0 general objective1 high\_res waypoint2 waypoint0 (1) communicate\_image\_data rover0 general objective1 high\_res waypoint2 waypoint0 (1) communicate\_image\_data rover0 general objective0 high\_res waypoint2 waypoint0 (1)

COMPLETE EXPLANATION

[(calibration\_target ?i ?t), (full ?y), (calibrated ?i ?r)]

sample\_rock rover0 rover0store waypoint3 (1)

communicate\_rock\_data rover0 general waypoint3 waypoint3 waypoint0 (1)

drop rover0 rover0store (1)

calibrate rover0 camera0 objective1 waypoint3 (1)

navigate rover0 waypoint3 waypoint1 (1)

navigate rover0 waypoint1 waypoint2 (1)

sample\_soil rover0 rover0store waypoint2 (1)

communicate\_soil\_data rover0 general waypoint2 waypoint2 waypoint0 (1)

take\_image rover0 waypoint2 objective0 camera0 high\_res (1)

calibrate rover0 camera0 objective1 waypoint2 (1)

take\_image rover0 waypoint2 objective1 camera0 high\_res (1)

communicate\_image\_data rover0 general objective1 high\_res waypoint2 waypoint0 (1) communicate\_image\_data rover0 general objective0 high\_res waypoint2 waypoint0 (1)

|  |  |
| --- | --- |
| Explanation | Related Action |
| calibration\_target | calibrate |
| equipped\_for\_soil\_analysis | sample\_soil |
| equipped\_for\_rock\_analysis | sample\_rock |
| equipped\_for\_imaging | calibrate, take\_image |
| empty | sample\_soil, sample\_rock, drop |
| full | sample\_soil, sample\_rock, drop |
| calibrated | calibrate, take\_image |
| communicated\_soil\_data | communicate\_soil\_data |
| communicated\_rock\_data | communicate\_rock\_data |
| channel\_free | communicate\_soil\_data, communicate\_rock\_data,  communicate\_image\_data |