

PIKES PEAK OBSERVATORY

A PRESENTATION TO
COLORADO SPRINGS
CITY COUNCIL

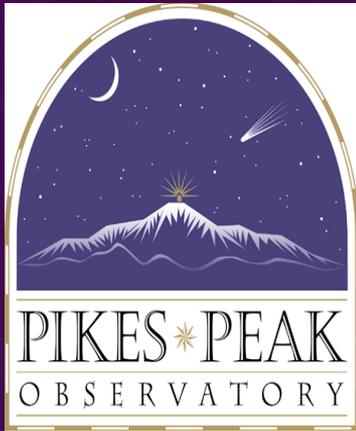
BOB SALLEE, BOARD CHAIRMAN

NATIONAL SPACE SCIENCE & TECHNOLOGY INSTITUTE

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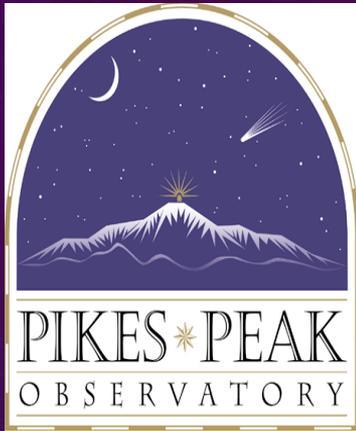
MAY 26, 2015

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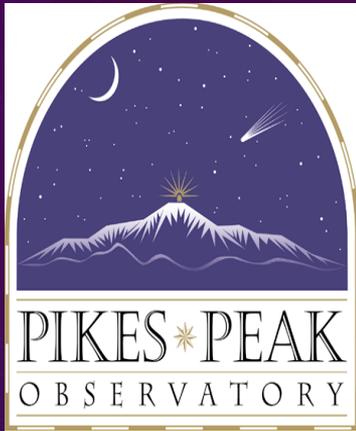
Why Build a PIKES PEAK OBSERVATORY?

*To engage and excite students, teachers,
researchers, and the public
in science and technology
through the exploration and
understanding of
our environment and the Universe.*



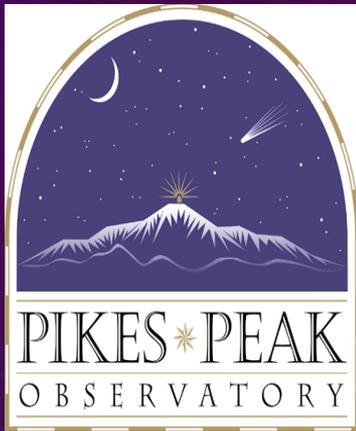
WHY PIKES PEAK?

- Easy access by road and rail; within central U.S.
- Atmospheric conditions conducive to observations
- Scientific benefits to this site studied, verified
- Educational structure and interest is established
- Existing tourism base and Pikes Peak notoriety

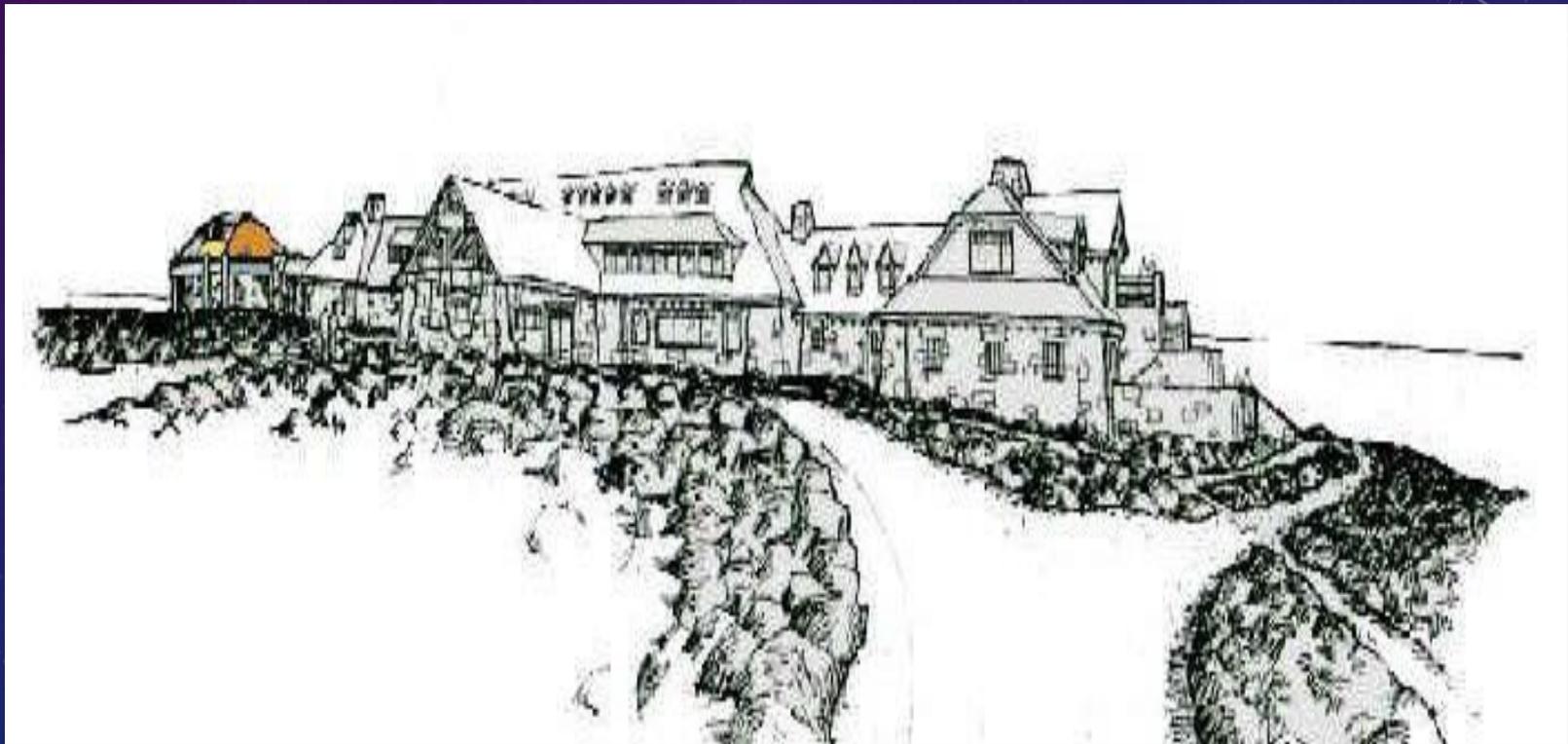


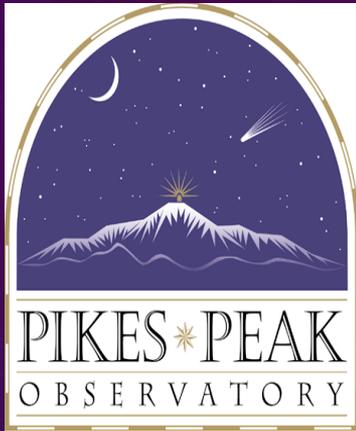
BACKGROUND - THE 1990s

- Concept: multi-use observatory on Pikes Peak Summit
- Educate students K-16, the general public, and tourists
- Support industry, military, and educational researchers



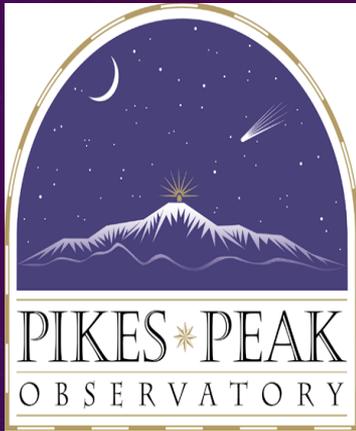
1998 SUMMIT HOUSE AND OBSERVATORY CONCEPT





WHAT'S CHANGED IN 2015?

- The US Forest Service has promulgated restrictions against “new uses” in national forestlands
- New technology and research focus permits use of meter class telescopes for education and research
- Remote tasking via Internet improves user access

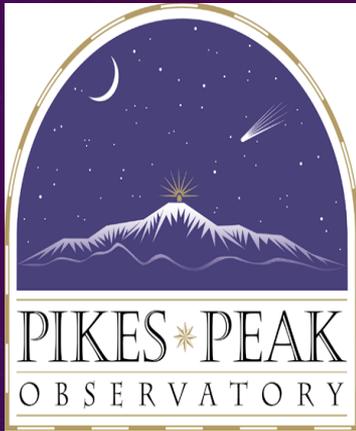


METER CLASS TELESCOPE



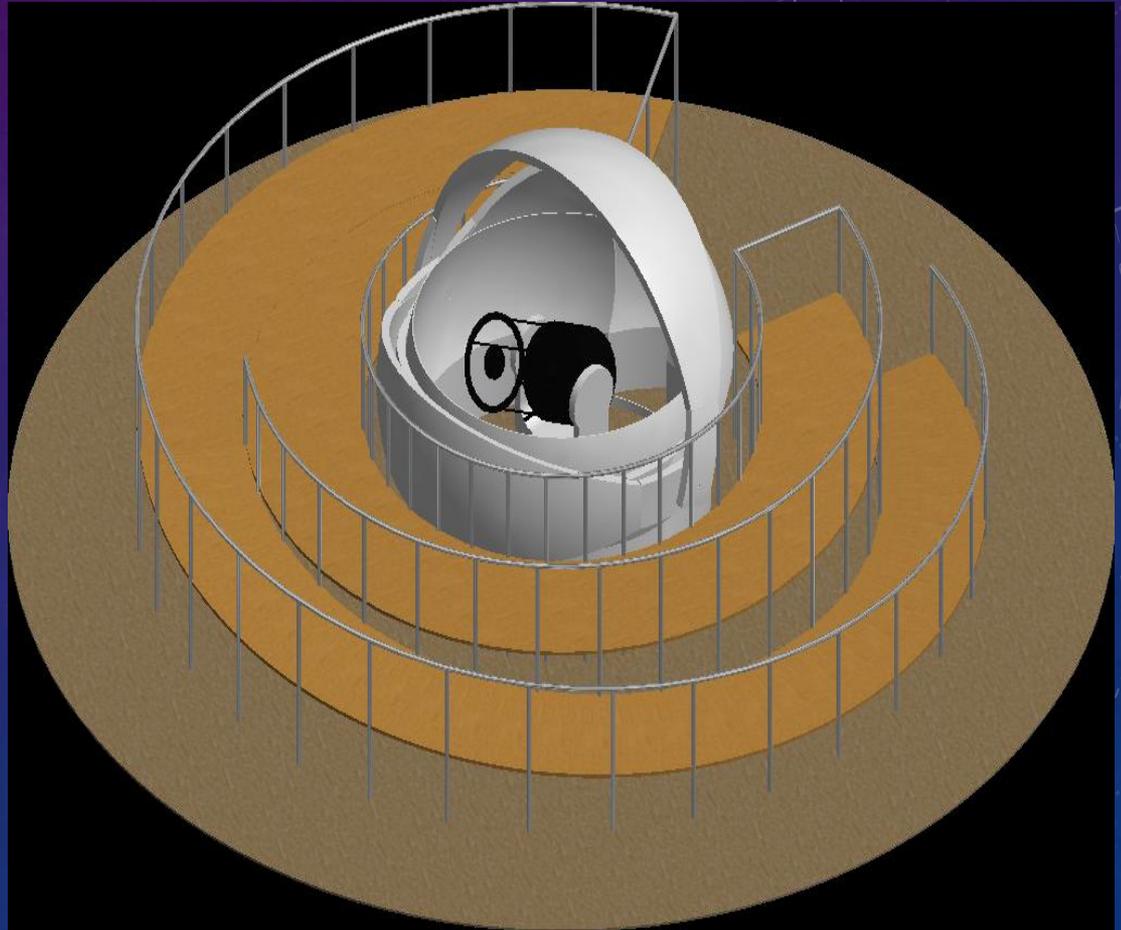
- Telescope has smaller footprint
- Can be operated remotely or on site
- Minimal environmental impact
- Could be operational by 2016; later integrated into Summit House plans

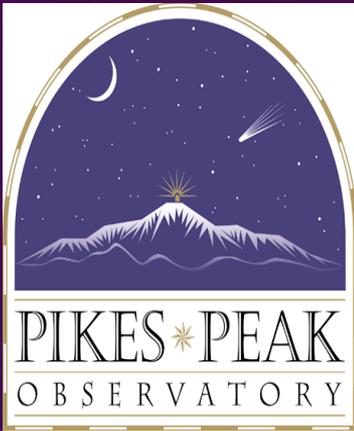




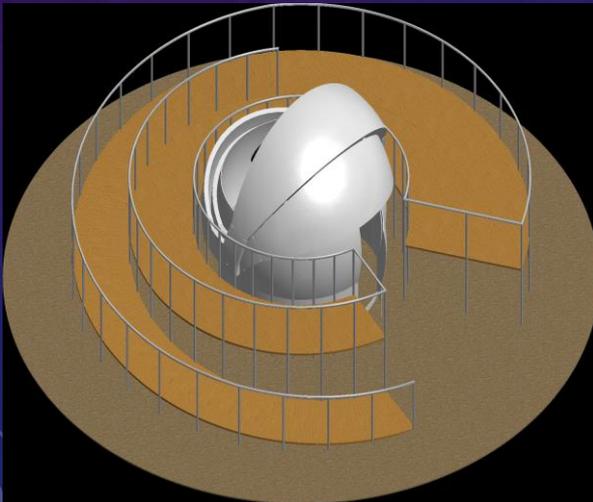
NOTIONAL OBSERVATORY

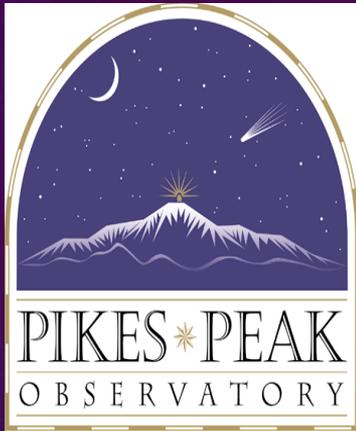
- ~ 35' footprint
- ~ 12' -18' diameter
- Temporary or Permanent





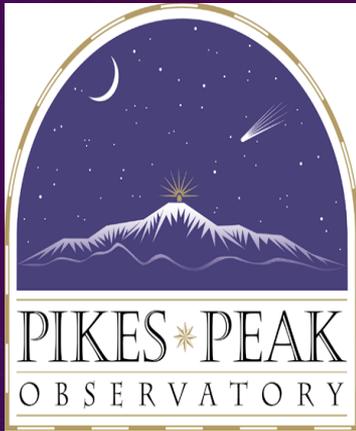
Relative Size of Observatory





CURRENT PLANNING CONSIDERATIONS

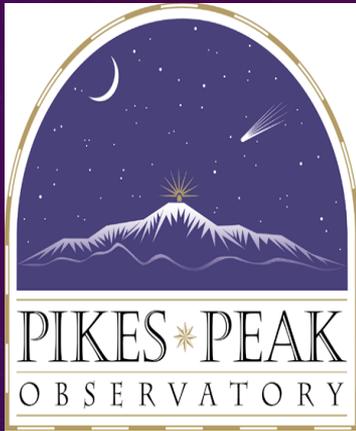
- Contract for Summit Design/Development to be let by July 1
- There will be opportunities for Public Input
- An observatory can be offered as an “Interpretive Display” showing historical, educational, economical, scientific importance
- A companion mobile lab will prove the concept, train remote PPO operation, and support local STEM education



PIKE PEAK OBSERVATORY MOBILE LAB

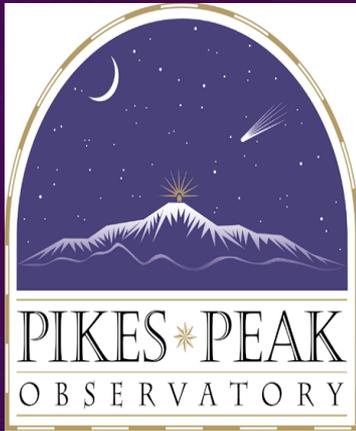
A mobile lab can demonstrate concept, train remote operation; support STEM education at Colo. schools





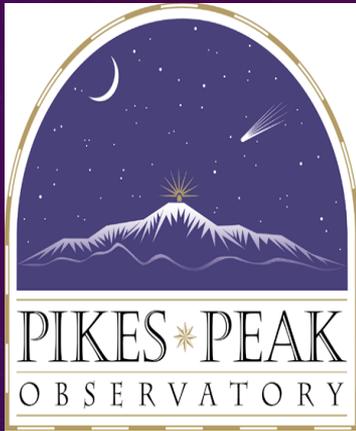
BENEFITS OF PPO AUGMENTED BY A MOBILE LAB/OBSERVATORY

- Telescope images can be displayed in the Summit House; visitors can tour the observatory
- Creates national and international scientific and educational connections to Pikes Peak



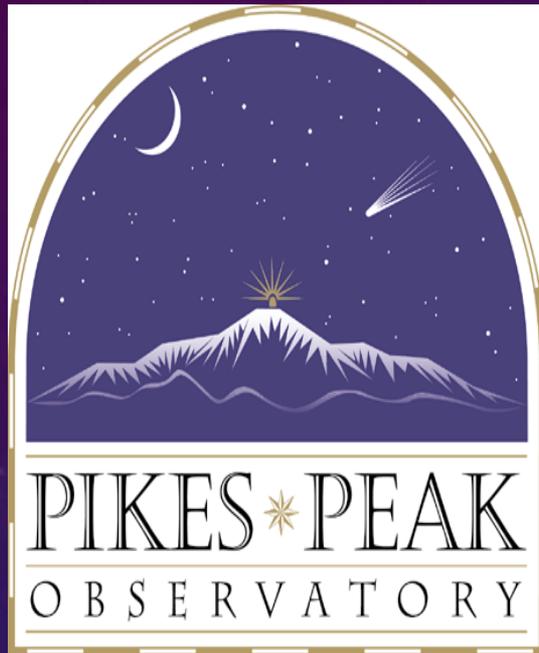
THE WAY AHEAD

- Development of PPO Mobile STEM Lab is underway
- PPO boosts regional STEM education and tourism, supports astronomical, climate, and weather research.
- A mobile unit prepares students for remote operation.



VISION STATEMENT FOR PIKES PEAK OBSERVATORY OCTOBER 25, 2014

- *Establish a research observatory integrated with the Summit House to conduct astronomical, atmospheric, and environmental studies, augmented by a mobile STEM lab oriented toward K-12 education and community involvement (i.e. Colorado Springs Science Festival).*
- *Provide remote tasking from the Colorado Springs Science Center, local schools and colleges, and other organizations.*
- *Create a destination experience to excite and educate visitors to Colorado Springs and to the summit of Pikes Peak.*



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Thank you for your attention.