



**UA Huntsville**  
THE UNIVERSITY OF ALABAMA IN HUNTSVILLE

# Techniques to Digitally Preserve the Historical Film of a Space Agency

10/4/2012

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Mark Becnel

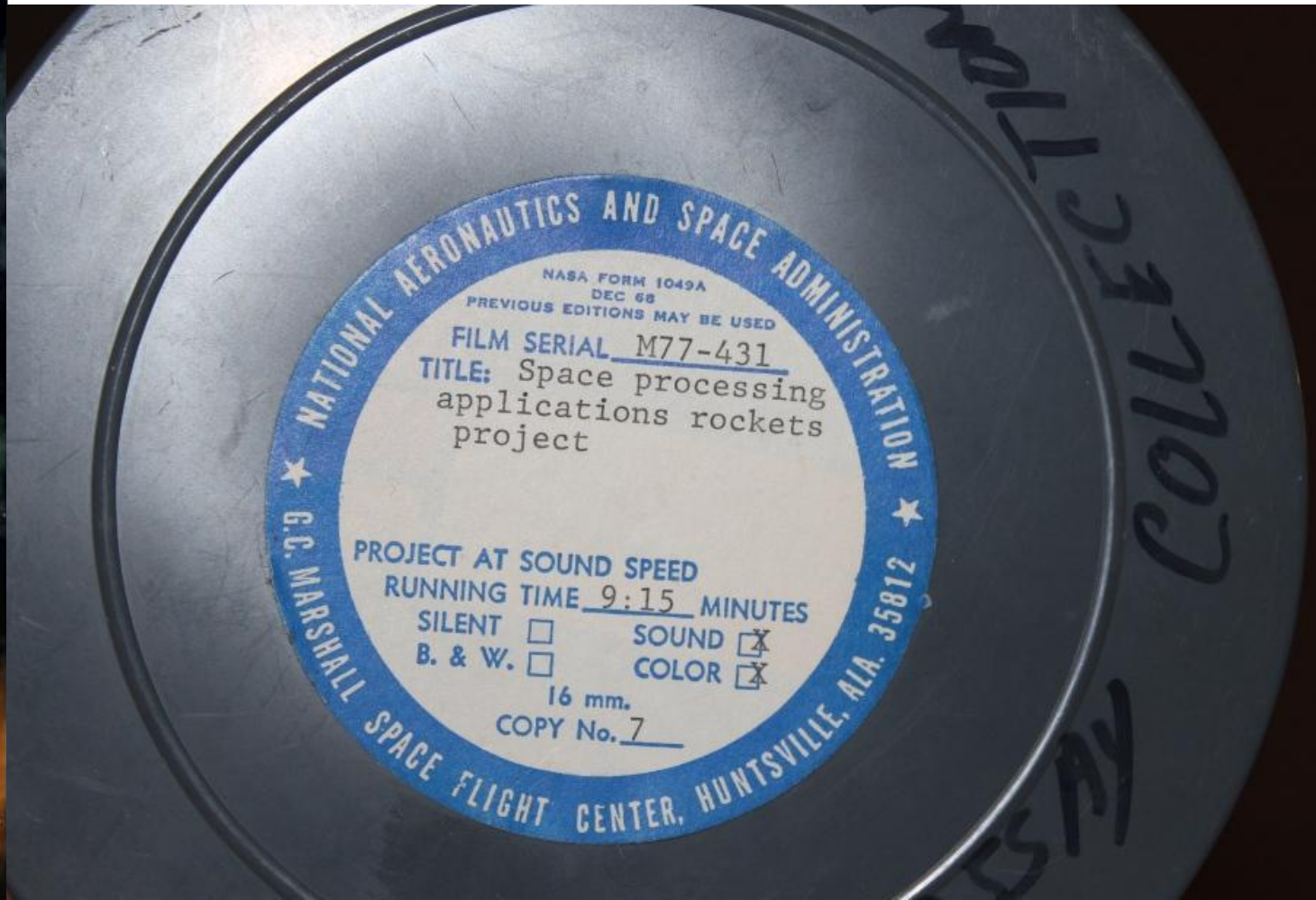
Graduate Student

The University of Alabama in Huntsville



Mark Becnel  
Graduate Student  
10/4/2012

# Identifying the Need to Digitize



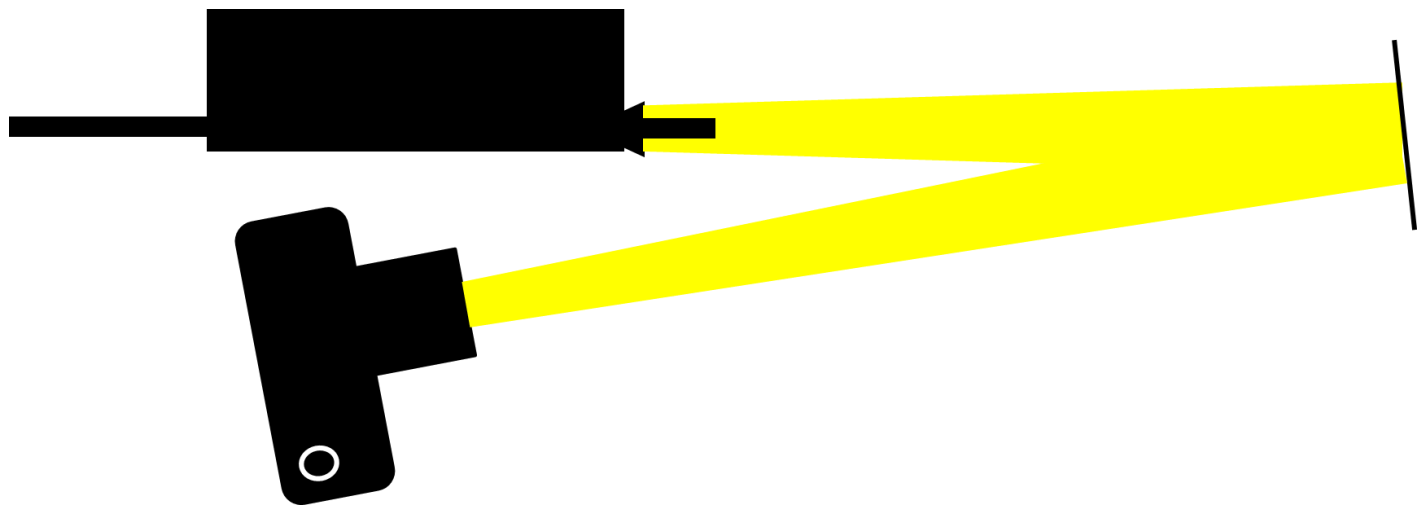
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Graduate Student  
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# Mechanisms of Digitization

## Reflective Projection



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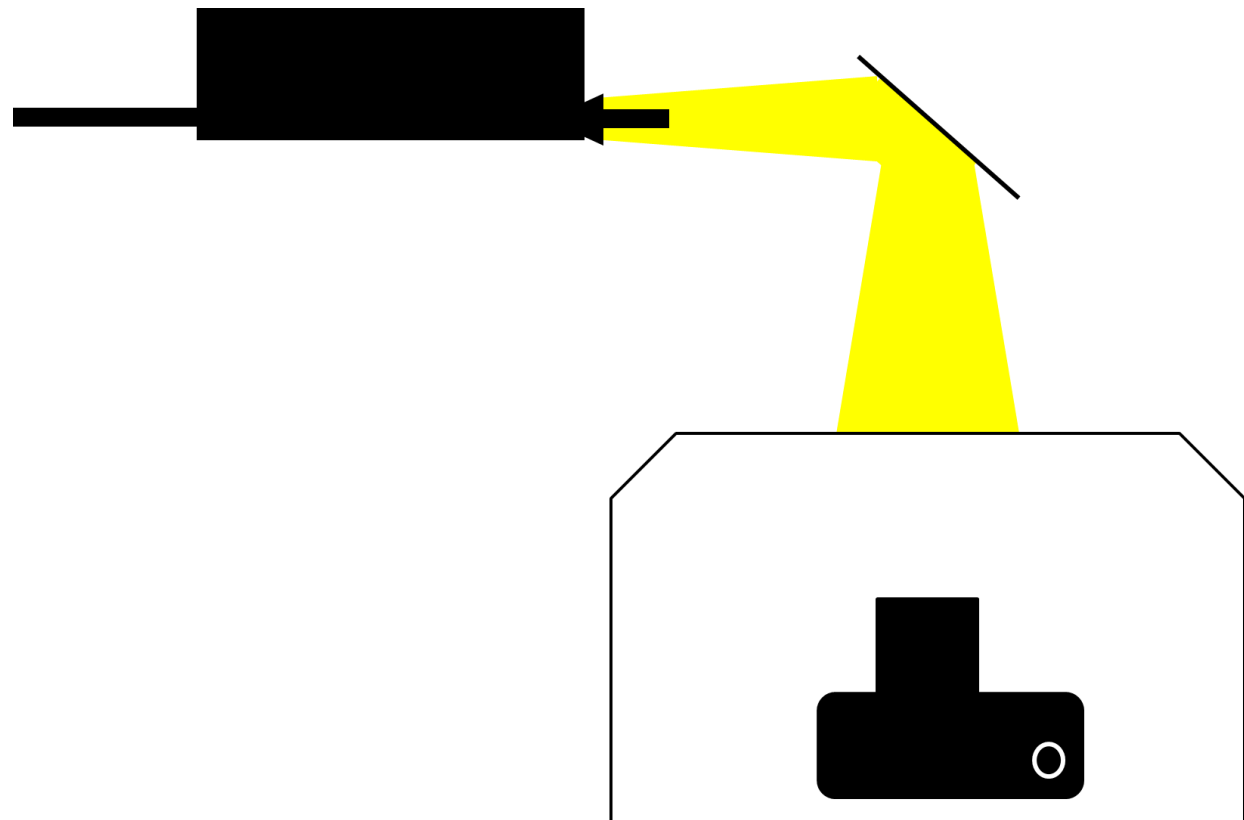




Mark Becnel  
Graduate Student  
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# Mechanisms of Digitization

## Direct Projection



Mark Becnel  
Graduate Student  
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# Projection Hardware



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Graduate Student  
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# Camera System

Canon Rebel T3i – 18-55mm Lens



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Mark Becnel  
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# Accomplishments and Future Work

- Hardware is acquired
- Collection film is labeled
- Newly donated items weekly in a wide variety of formats
- Ideal facilities would be to have a dedicated large, dark room to project the images
- The standard needs to be set, but only once the final procedure is complete

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# New Technologies

- New technologies are the answer
  - Higher quality conversion
  - Faster
  - Brings in new generation





# Senior Design Team Requirements

Senior design project teams will be given the following challenge requirements:

1. Create an automatic imaging system
2. Must individually image and advance frames
3. 3. Must be compatible with 8mm (or Super 8, 16mm, or 35mm) film
4. Must prioritize image quality and include complete frame
5. Ensure automatic operation for entire reel, approximately 25 minutes each
6. Must not distort image
7. Audio need not be recovered from film



Mark Becnel  
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# Acknowledgements

- UAH Library
  - UAH Office of Vice President for Research
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- 
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## Questions and Comments

[Sample Film](#)

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