

# 2020 Airport Airspace and Land Use **GUIDEBOOK**

A primer providing an overview of the Guidebook





## Significant Changes to Chapter 333 (2016)\*



- New criteria for FDOT evaluation of permit applications
- New criteria and processes for airport zoning regulations
- Modifications to land use compatibility regulations
- Requirement for interlocal agreement or joint zoning board for airport zoning in many circumstances

- Transition provisions
- Submittal requirements to the FDOT Aviation Office

\*These changes are mandated by state law – NOT BY FDOT.



## Florida's Public Use Airports

In addition to Chapter 333, FS, 14 CFR, Part 77 governs land use compatibility in Florida. There have been significant changes to these two laws since the last Guidebook was published in 2012.



### [Federal] 14 Code of Federal Regulations (CFR), Part 77

- Safe, Efficient Use, and Preservation of the Navigable Airspace



### [State] Chapter 333, Florida Statutes (FS)

- Airport Zoning
- Amended in 2016

## Incompatible land uses can be summarized as those land uses related to:



**TALL STRUCTURES**  
Infrastructure like tall buildings and power lines in the vicinity of an airport can pose a serious risk towards low-altitude aircraft operations on departure or arrival



**VISUAL OBSTRUCTIONS**  
Dust, light pollution, or other visual obstructions can greatly hinder a pilot's ability to establish and maintain safe flight



**NOISE**  
Aircraft noise can inhibit the welfare and wellbeing of the public surrounding an airfield



**WILDLIFE ATTRACTANTS**  
Surrounding airport uses that attract wildlife (landfills, ponds, waterways etc) can pose a great risk towards aircraft operations in the vicinity



**POPULATION DENSITY**  
Congested public areas surrounding an airport can increase the impact of aircraft accidents should they occur



### Key Components of Local Zoning Regulations



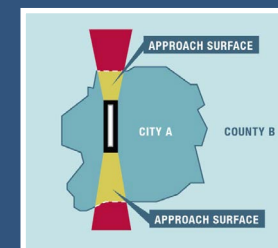
Land use restrictions within noise contours



Restrictions of new incompatible land uses within existing RPZs



Landfill proximity restrictions and wildlife mitigation practice



Handling overlap of zoning between jurisdictions



### FDOT Coordination

- The FDOT is a resource for understanding existing state-level regulations
- Any further inquiries on creating/adopting local-level zoning regulations can be directed towards the FDOT Aviation Office, Airspace and Land Use Manager
- Once adopted, local governments must submit a copy of their airport zoning regulations to FDOT at the following address:



**Aviation Office**  
**Florida Department of Transportation**  
**605 Suwannee Street, MS 46**  
**Tallahassee, FL 32399-0450**  
**Attention: Airspace and Land Use Manager**

### Reference Materials

- For a comprehensive guide for understanding airport compatible land use, complying with state and federal law, and adopting local airport zoning regulations, please visit the following link: [www.fdot.gov/aviation/flpub.shtm](http://www.fdot.gov/aviation/flpub.shtm)
- For more information on airport and airspace zoning, please visit the FDOT Aviation Programs page and navigate to the Airport and Airspace Protection and Zoning page: [www.fdot.gov/aviation/compland.shtm](http://www.fdot.gov/aviation/compland.shtm)
- To review the most up-to-date language of Chapter 333, FS (Airport Zoning), please visit the statutes database available on Online Sunshine: [www.leg.state.fl.us/Statutes/](http://www.leg.state.fl.us/Statutes/)
- To review the most up-to-date language of 14 CFR Part 77, please visit the Electronic Code of Federal Regulations site and navigate to Title 14, Part 77: [www.ecfr.gov/](http://www.ecfr.gov/)

### Airport Zoning Regulations Overview

The 2020 Airport Airspace and Land Use Guidebook provides an overview of incompatible land uses surrounding an airport along with the existing federal and state laws and regulations that seek to protect airports and military airfields, airspace, people and property in the vicinity of airports. In addition, the guidebook provides local governments with the tools to enact airport zoning regulations that enforce these laws.

Chapter 333, Florida Statutes and 14 Code of Federal Regulations, Part 77 are the two major laws governing airport land use compatibility in Florida. Since the last Guidebook was published in 2012, there have been changes to these two laws, prompting the creation of an updated Guidebook. These laws are detailed later in the brochure.



### Incompatible Land Use

One way to support an airport’s continued operation is by protecting it from the encroachment of land use types considered “incompatible” with aircraft operations. Local planners and zoning authorities have the responsibility to encourage and enforce compatible land use practices near their airport(s) to protect this critical transportation infrastructure as well as the safety and quality of life of residents and businesses.



**TALL STRUCTURES**  
 Infrastructure like tall buildings and power lines in the vicinity of an airport can pose a serious risk towards low-altitude aircraft operations on departure or arrival



**VISUAL OBSTRUCTIONS**  
 Dust, light pollution, or other visual obstructions can greatly hinder a pilot’s ability to establish and maintain safe flight



**NOISE**  
 Aircraft noise can inhibit the welfare and wellbeing of the public surrounding an airfield



**WILDLIFE ATTRACTANTS**  
 Surrounding airport uses that attract wildlife (landfills, ponds, waterways etc) can pose a great risk towards aircraft operations in the vicinity



**POPULATION DENSITY**  
 Congested public areas surrounding an airport can increase the impact of aircraft accidents should they occur



# Key Components of Local Zoning Regulations

## Permit Process for Obstructions\*

Airport zoning regulations must include the following components:

- Permit for construction/alteration of obstructions
- Obstruction marking and lighting
- Documentation showing compliance with federal requirements and valid aeronautical study

Considerations include, but are not limited to:

- Safety of persons both in the air and on the ground
- Safe and efficient use of navigable airspace

*Permit cannot be accepted solely on the basis of the FAA's Determination that proposed structure isn't an airport hazard*

*\*Per Section 333.03(1)(c)1.-5, FS*



## Landfill Proximity Restrictions and Wildlife Mitigation Practices\*

Airport zoning regulations must include the following:

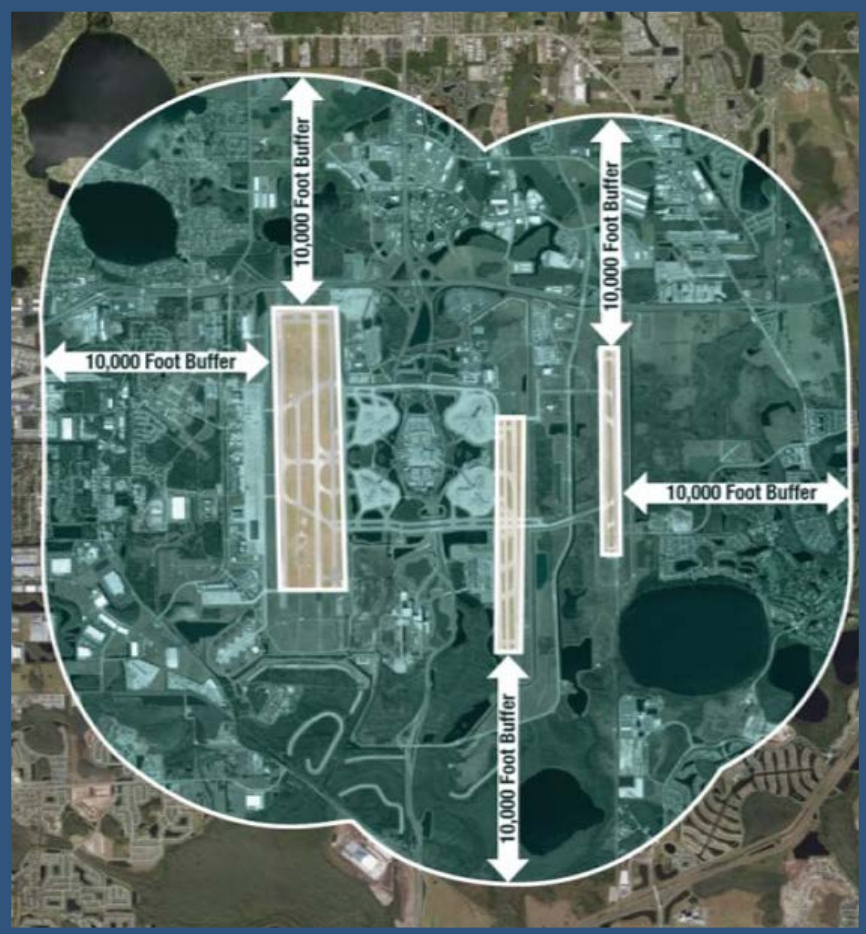
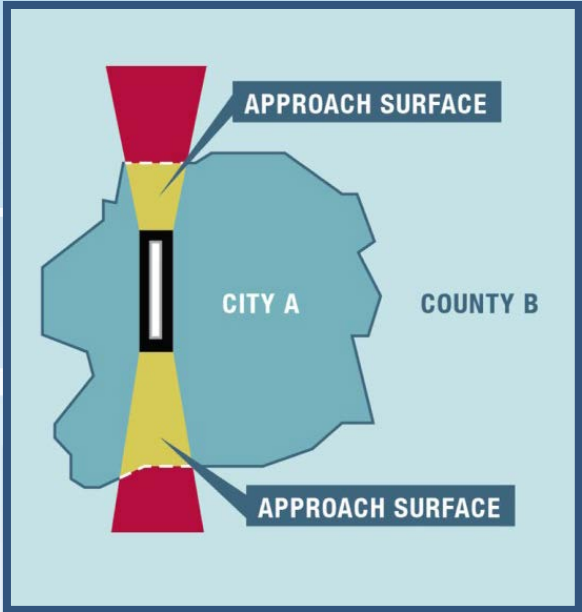
- Prohibition of new landfills within a certain proximity of an airport's runways, depending on the type of aircraft operations (turbine or non-turbine)
  - Refer to Section 333.03(2)(a), FS and graphic below for the proximity criteria
- Restrictions on existing landfills that fulfill similar criteria
- Surrounding stakeholders, such as landfill operators, must incorporate bird management techniques or other practices to minimize bird hazards to airborne aircraft

*\*Per Section 333.03(2)(a) and 333.03(2)(b), FS*

## Handling Overlap of Zoning Between Jurisdictions\*

- Airport property and/or surrounding airspace could overlap between multiple local jurisdictions, which warrants additional coordination
- This results in either the creation of an **interlocal agreement or a joint airport protection zoning board**
- Structure of the zoning board and roles assigned should be detailed in the regulations and should include members from both parties

*\*Per Section 333.03(1)(c)1.-5, FS*



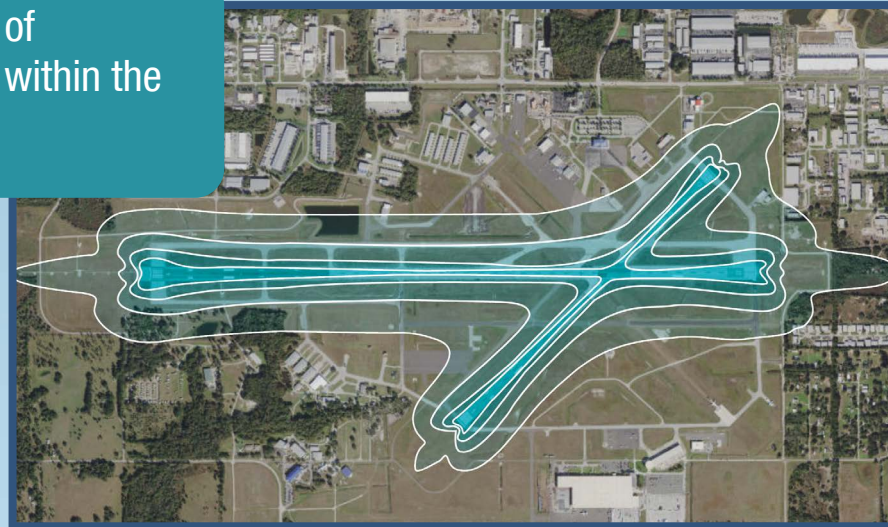


# Key Components of Local Zoning Regulations

## For Airports That Have Adopted a Part 150 Noise Study\*

Address the prohibition of incompatible land uses within the noise contours.

*\*Per Section 333.03(2)(c)*



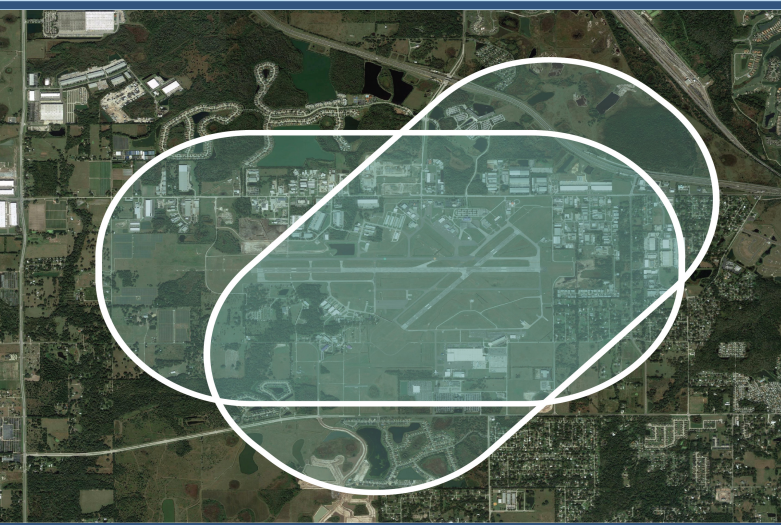
## Address Restrictions of New Incompatible Land Use Within Existing RPZs\*

- Runway Protection Zone (RPZ): An area at ground level off the runway end to enhance the safety and protection of people and property on the ground
- RPZ regions (shown on the right) are very sensitive towards departing/arriving aircraft and must be clear of obstructions

*\*Per Section 333.03(2)(e), FS and Advisory Circular 150/5300-13A*

## For Airports That Have Not Adopted a Part 150 Noise Study\*

Address the prohibition of residential construction and any educational facility, with the exception of aviation school facilities, within an area contiguous to the airport measuring one-half the length of the longest runway on either side of and at the end of each runway centerline.



*\*Per Section 333.03(2)(d)*








## 14 CFR Part 77 – Navigable Airspace

### Overview

- 14 Code of Federal Regulations (CFR), Part 77, are the federal standards that preserve and protect the safety, integrity of the National Airspace System (NAS) from airspace obstructions
- Importance of Part 77:
  - Explains notice requirements to the FAA for certain proposed construction or the alteration of existing structures
  - Provides standards used to determine obstructions to air navigation and navigational and communication facilities
  - Outlines review process for aeronautical studies of obstructions

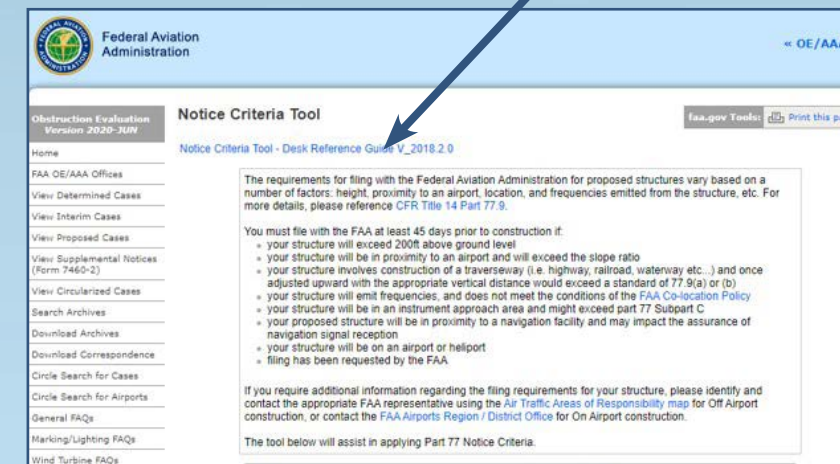
### Standards for Determining Airspace Obstructions

-  New and proposed construction which exceed federal obstruction standards (s. 77.17) are presumed hazards to air navigation unless deemed through further study that the intrusion is not a hazard
-  FAA will apply the standards outlined in Section 77.17 when referencing an existing airport facility, other airport proposals received, and military operations before it issues a final determination
-  To best visualize the complex airspace surfaces surrounding an airfield to identify obstructions, imaginary surfaces are utilized

### Notice Requirements





- Development sponsors (someone proposing the construction of a potential obstruction and/or submitting an FAA Form 7460-1) can use the FAA's Notice Criteria Tool (NCT) to determine applicability\* for reporting construction or alteration of existing infrastructure
- Upon determination that further review is necessary, development sponsors must file a Form 7460-1 (Part 77.9)

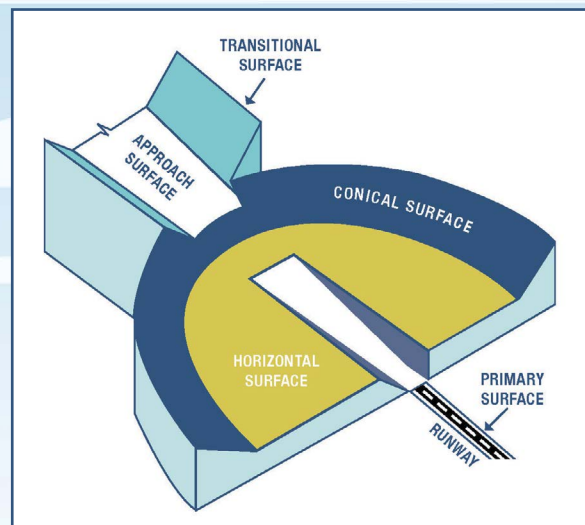
### Step-by-step guide



\*Refer to 14 CFR Part 77(b) for specific criteria.

### Review Process and Helpful Tips

-  upon submitting the 7460-1 form, the FAA will conduct an aeronautical study to determine whether the proposed construction or alteration is a hazard to safety or conflict with efficient use of navigable airspace
-  Failure to fill out a Form 7460-1 when applicable violates the notice requirements of Part 77 and is subject to civil penalties
-  To best plan for notices of proposed construction, development sponsors can be familiar with imaginary surfaces around airfields
-  With the complex nature of imaginary surfaces, local municipalities can adopt similar graphical depictions into airport zoning regulations for ease of understanding



### Imaginary Surfaces

Imaginary Surfaces are used to visualize airspace regions surrounding airports that are deemed significant navigable airspace and thus have certain restrictions.



# Florida Statute Chapter 333: Permitting Process



## (Proposed) Local Permit Process\*

- Per Section 333.07, FS, airport zoning regulations must include a process for obtaining an airspace obstruction permit
- Local governments can serve as the permitting authority if the following conditions are met:
  - Adequate airport protection zoning regulations are adopted
  - Regulations are on file with FDOT
  - A permitting process is established

*\*This is NOT a replacement of the Federal Airspace Obstruction Permit required per Part 77.17*

## Permit Process for Obstructions

- Per Section 333.025(1), FS, FDOT requires submittal of an “Airspace Obstruction Permit Application” (Form 725-04-11) for structures that meet the specific criteria of the statute
- Completed applications need to be submitted to the FDOT Aviation Office (see below for address)
- FDOT has 30 days from date of submittal to approve/deny the application.

| State of Florida<br>Department of Transportation   |  | AIRSPACE OBSTRUCTION PERMIT APPLICATION  |  | FOR FDOT USE ONLY<br>FDOT Permit Number<br>-FLA- - |  |
|--|--|--|--|--|--|
| 1. Applicant (person proposing this action):<br>Name: _____<br>Title: _____<br>Address 1: _____<br>Address 2: _____<br>City: _____ State: _____ Zip: _____<br>Phone #: _____ Fax #: _____<br>E-mail: _____   |  | 2. Applicant's Representative (if other than #1):<br>Name: _____<br>Title: _____<br>Address 1: _____<br>Address 2: _____<br>City: _____ State: _____ Zip: _____<br>Phone #: _____ Fax #: _____<br>E-mail: _____  |  |  |  |
| 3. Type: <input type="checkbox"/> Antenna Tower <input type="checkbox"/> Antenna - Side Mount <input type="checkbox"/> Crane<br><input type="checkbox"/> Building <input type="checkbox"/> Power Line <input type="checkbox"/> Pole <input type="checkbox"/> Traverse Way<br><input type="checkbox"/> Landfill <input type="checkbox"/> Water Tank <input type="checkbox"/> Other: _____ |  | 4. Notification Requirements:<br>Is proposed site within an incorporated community? <input type="checkbox"/> Yes <input type="checkbox"/> No<br>Have appropriate building/zoning authorities been notified?<br><input type="checkbox"/> Yes <input type="checkbox"/> No<br>City/county requiring building permit: _____<br>Name of local official: _____<br>Title: _____<br>Address 1: _____<br>Address 2: _____<br>City: _____ Zip: _____<br>Phone #: _____ Fax #: _____<br>E-mail: _____ |  |  |  |
| 5. Site Elevation (AMSL): _____ Feet   |  | 6. Total Structure Height (AGL): _____ Feet  |  |  |  |
| 7. Overall Height (#5 + #6) (AMSL): _____ Feet   |  |  |  |  |  |
| 8. Latitude: _____° _____' _____" N  |  | 9. Longitude: _____° _____' _____" W   |  |  |  |
| 10. Datum: <input type="checkbox"/> NAD 83 <input type="checkbox"/> NAD 27 <input type="checkbox"/> Other _____  |  | 11. County: _____  |  |  |  |

## In Determining Whether to Issue or Deny a Permit, The Department Shall Consider:

- The safety of persons on the ground and in the air
- The safe and efficient use of navigable airspace
- The nature of the terrain and height of existing structures
- The effect of the construction or alteration of an obstruction on the state licensing standards for a public-use airport contained in chapter 330 and rules adopted there under
- The character of existing and planned flight operations and developments at public-use airports
- Federal airways, visual flight rules, flyways and corridors, and instrument approaches as designated by the FAA
- The effect of the construction or alteration of an obstruction on the minimum descent altitude or the decision height at the affected airport
- The cumulative effects on navigable airspace of all existing obstructions and all known proposed obstructions in the area





## Summary

- Chapter 333 provides state-level regulations for airport zoning
- Chapter 333 was amended in 2016, necessitating a review and update of airport zoning regulations across the state
- Chapter 333 requires that airport zoning regulations address specific components, as previously detailed.
- FDOT is the permitting authority for jurisdictions with no adopted airport zoning regulations
- Local government becomes permitting authority when they adopt airport zoning regulations



## Significant Changes to Chapter 333 (2016)\*

- New criteria for FDOT evaluation of permit applications
- New criteria and processes for airport zoning regulations
- Modifications to land use compatibility regulations
- Requirement for interlocal agreement or joint zoning board for airport zoning in many circumstances
- Transition provisions
- Submittal requirements to the FDOT Aviation Office



*\*These changes are mandated by state law – NOT BY FDOT.*

## FDOT Coordination

- FDOT is a resource for understanding existing state-level regulations
- Any further inquiries on creating/adopting local-level zoning regulations can be directed towards the FDOT Aviation Office, Airspace and Land Use Manager
- Once adopted, local governments must submit a copy of their airport zoning regulations to FDOT at the address below



## Reference Materials

- For the recently updated Airport Airspace and Land Use Guidebook that provides more detailed guidance on creating and adopting local airport zoning regulations, please visit the following link: [www.fdot.gov/aviation/flpub.shtm](http://www.fdot.gov/aviation/flpub.shtm)
- For more information on state-regulated airport and airspace zoning, please visit the FDOT Aviation Programs page and navigate to the Airport and Airspace Protection and Zoning page: [www.fdot.gov/aviation/compland.shtm](http://www.fdot.gov/aviation/compland.shtm)
- To review the most up-to-date language of Chapter 333, FS (Airport Zoning), please visit the statutes database available on Online Sunshine: [www.leg.state.fl.us/Statutes/](http://www.leg.state.fl.us/Statutes/)
- To review the most up-to-date language of 14 CFR Part 77, please visit the Electronic Code of Federal Regulations site and navigate to Title 14, Part 77: [www.ecfr.gov/](http://www.ecfr.gov/)

## Integration with Local Comprehensive Plan

Airport zoning regulations can be incorporated as part of the local comprehensive plan or local zoning code (land development regulations), per Chapter 163, FS. In addition to airport zoning regulations, there is the potential for airport master plan and/or airport layout plan language to be seamlessly integrated into comprehensive plan in one of two ways:

- Include language in the local regulatory documents that explicitly adopts the airport master plan(s) of the airport(s) within its jurisdiction and provide reference to that airport master plan(s)
- Copy the text of the airport master plan(s) into the comprehensive plan itself

Airport-local staff collaboration is KEY!



**Aviation Office**  
**Florida Department of Transportation**  
 605 Suwannee Street, MS 46  
 Tallahassee, FL 32399-0450  
 Attention: Airspace and Land Use Manager



# 2020 Airport Airspace and Land Use

**GUIDEBOOK PRIMER**

