

“Superficies Limitadoras de Obstáculos, su aplicación en la Certificación de Aeródromos”

“Taller Regional sobre Problemática en la Certificación de Aeródromos”

Lima – Perú, Setiembre 2010

Grupo Siete

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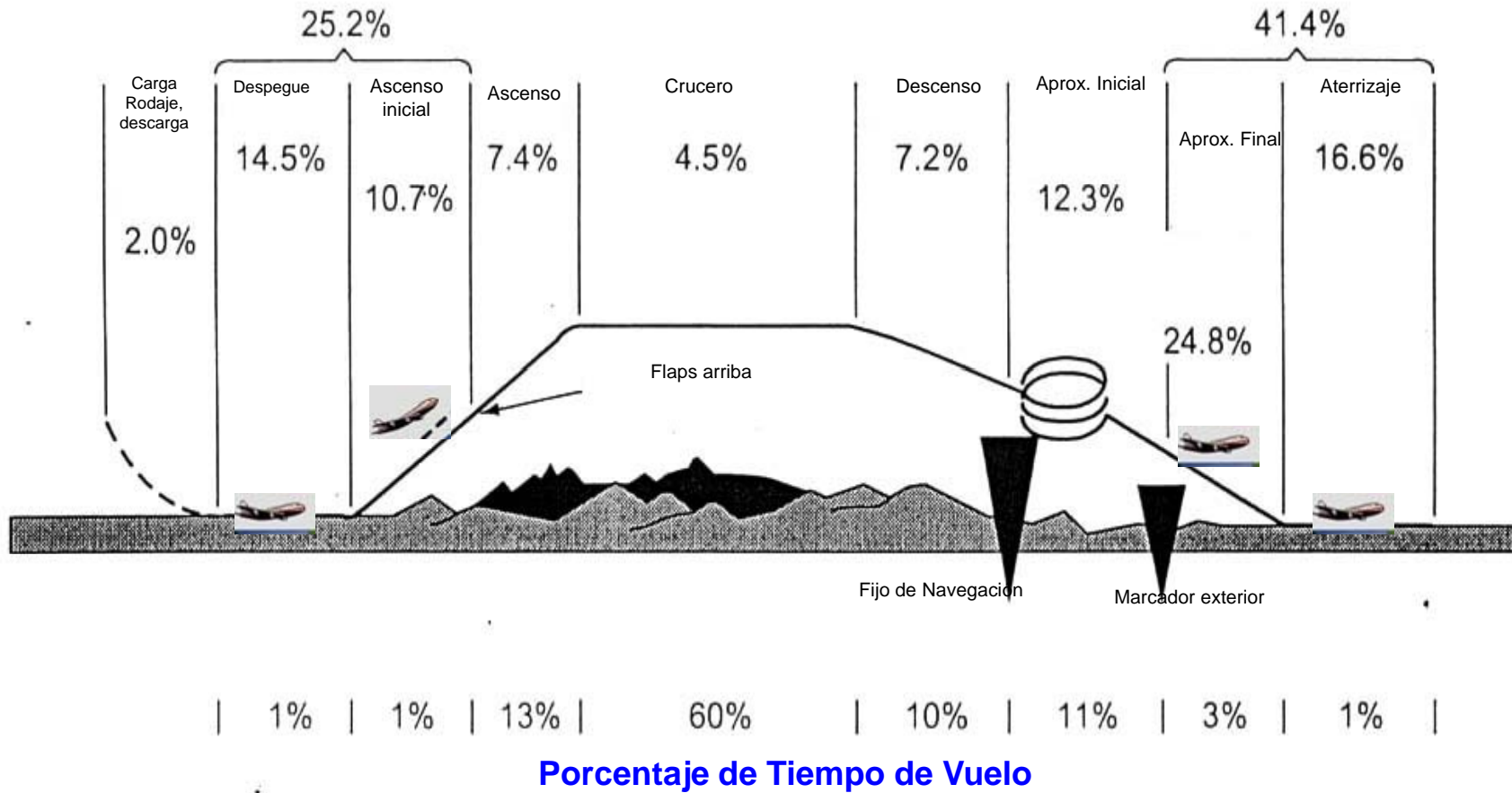
William Silva (P)

**“Taller Regional sobre Problemática en la Certificación
de Aeródromos”**

Lima – Perú, Setiembre 2010

Introducción

Porcentaje de todos los accidentes



Fuente: Reducción de Accidentes de Aproximación y Aterrizaje (ALAR)

. Marco Regulatorio

- Documentación OACI



Superficies Limitadoras de Obstáculos

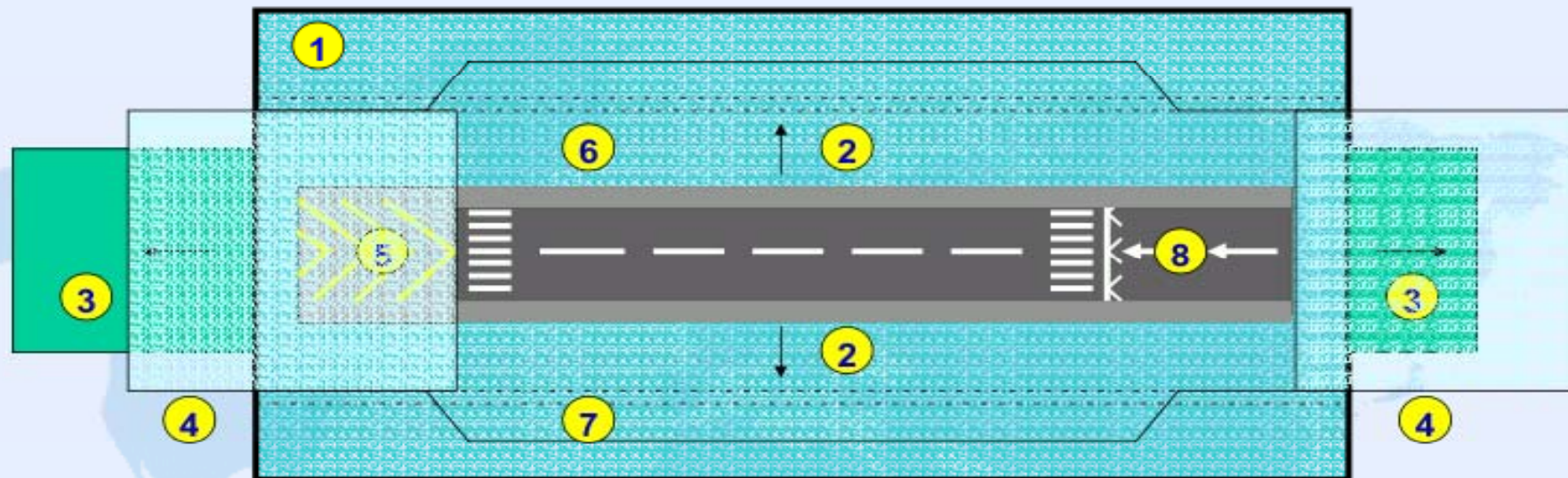
- Superficie de aproximación
- Superficie de ascenso en el despegue
- Superficie de transición
- Superficie horizontal interna
- Superficie cónica
- Superficie de Aproximación Interna(*)
- Superficie de Transición Interna (*)
- Superficie de Aterrizaje Interrumpido (*)
- Superficie Horizontal Externa

(*) Para pistas con aproximaciones de precisión

VINCULADAS A LA CLAVE DE AERÓDROMO (Franja de pista) y al TIPO DE APROXIMACION

FRANJAS DE PISTAS

PARAMETRO	1	2	3	4
Comienzo antes del Umbral	≥30m (60m Inst)	≥60m	≥60m	≥60m
Final desde el Extremo de Pista a Zona de Parada	≥30m (60m Inst)	≥60m	≥60m	≥60m
Ancho para Aproximaciones Instrumentales de Precisión	≥150m	≥150m	≥300m	≥300m (N)
Ancho para Aproximaciones Instrumentales de No Precisión	≥150m	≥150m	≥300m	≥300m (R)
Ancho para Aproximaciones No Instrumentales	≥60m	≥80m	≥150m	≥150m (R)



1- FRANJA DE PISTA

2- FRANJA NIVELADA

3- RESA DE 90 a 240m

4- CWY

5- SWY

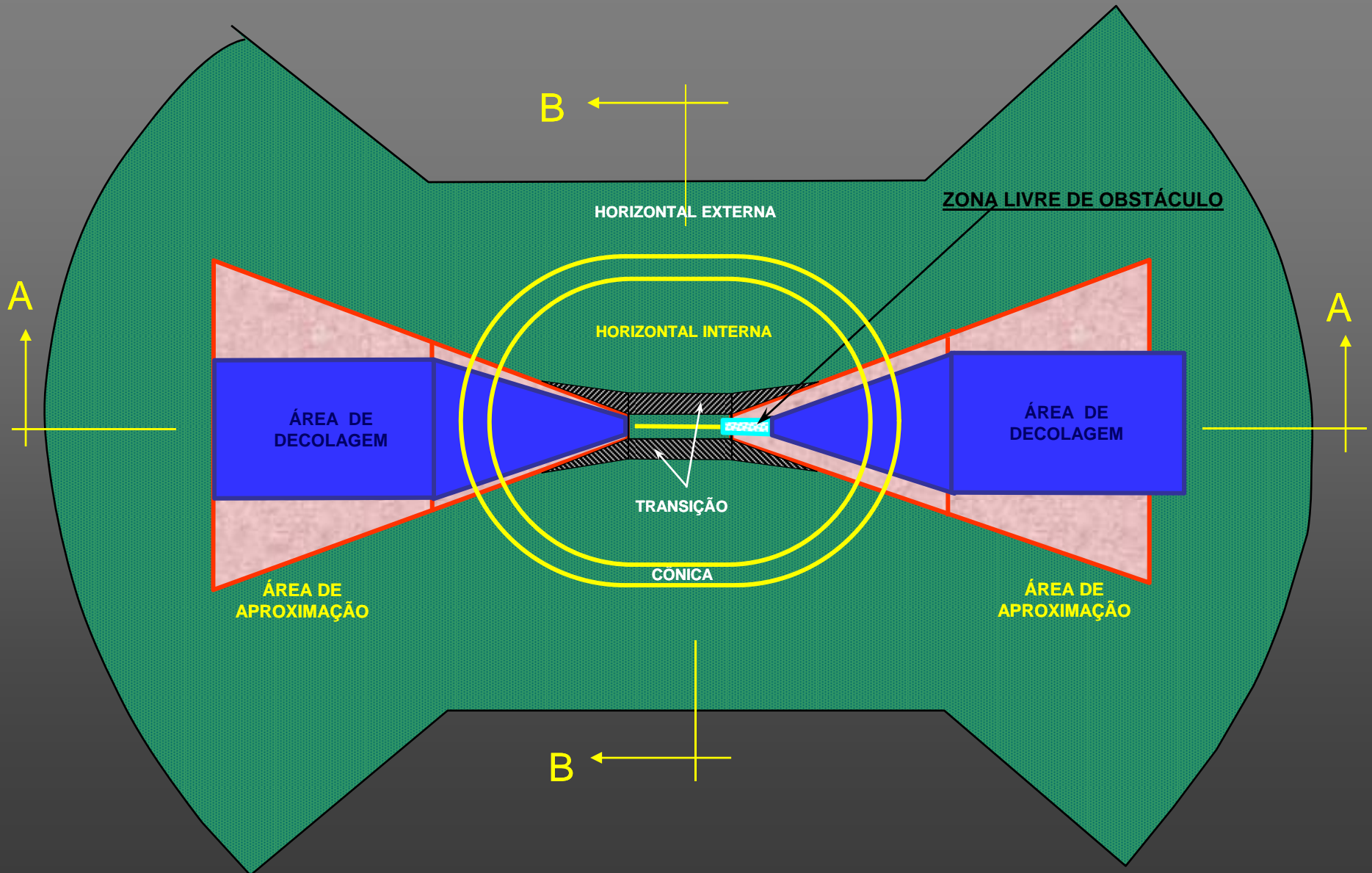
6- AYUDAS A LA NAVEGACION FRANJIBLES, 75m (2010)

7- AYUDAS A LA NAVEGACION FRANJIBLES. 77,5m PARA 4F

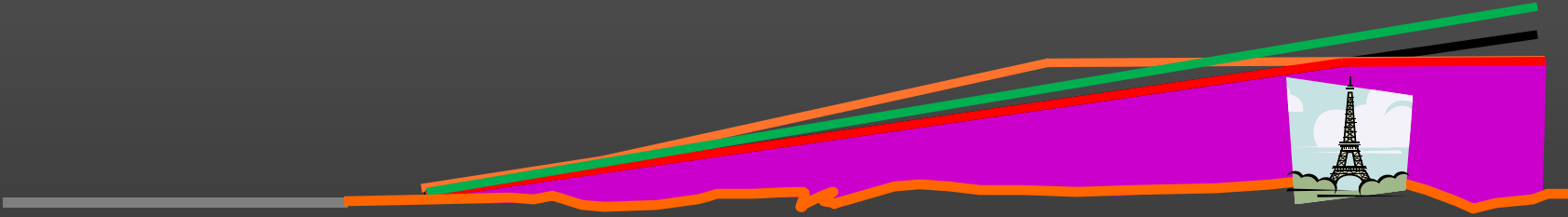
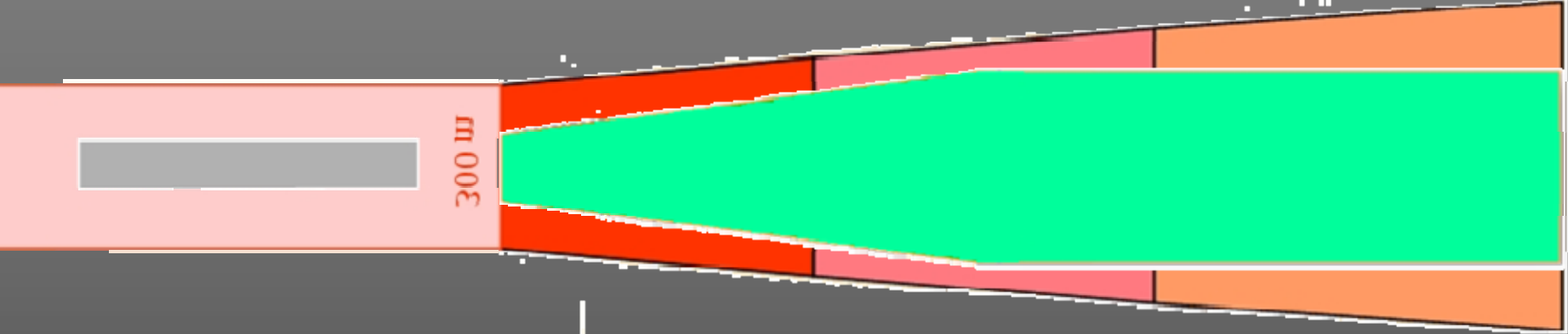
8- UMBRAL DESPLAZADO TEMPORAL O TRANSITORIO

ZONA DE PROTEÇÃO DE AERÓDROMO

IFR



Envolvente SLO y Pendientes Aprox. - Desp.



Anexo 14 e as superfícies consideradas “invioláveis”

4.2.3 New objects or extensions of existing objects **shall not be permitted above an approach or transitional surface** except when, in the opinion of the appropriate authority, the new object or extension would be shielded by an existing immovable object.

4.2.25 New objects or extensions of existing objects **shall not be permitted above a take-off climb surface** except when, in the opinion of the appropriate authority, the new object or extension would be shielded by an existing immovable object.

NÃO CABEM ESTUDOS AERONÁUTICOS PARA VIOLAÇÃO DESTAS SUPERFÍCIES

Estudo de Caso

Faixa de pista e transição

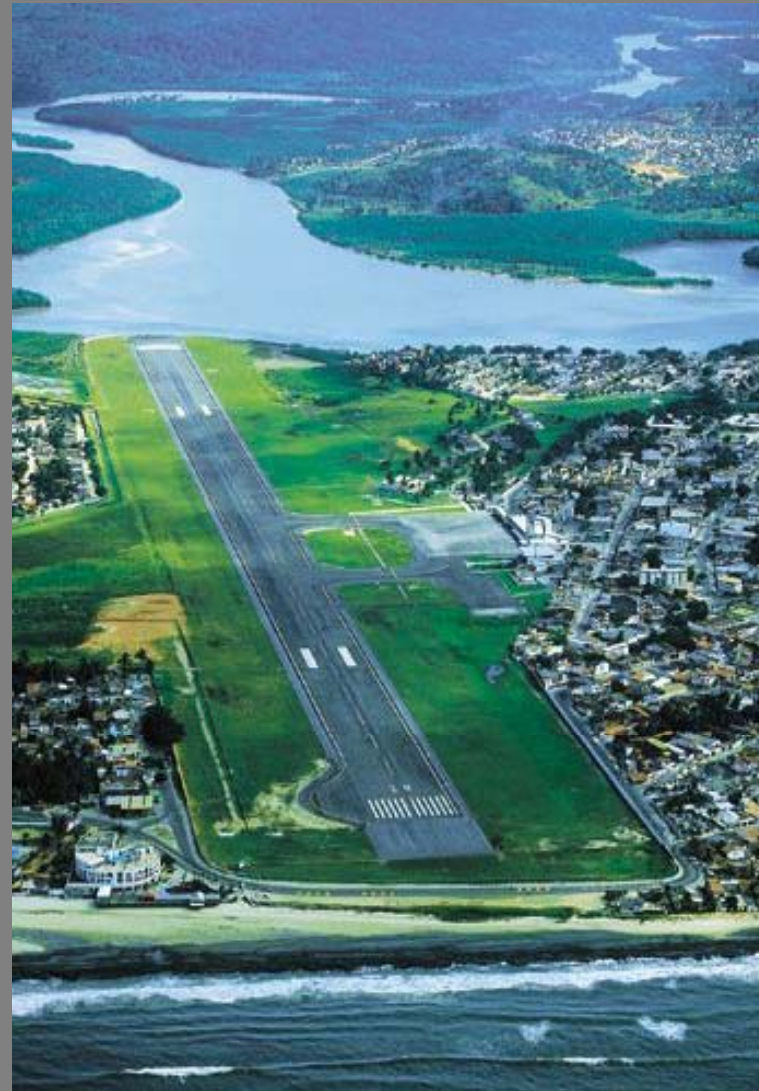
VISTA DO AERÓDROMO DE ILHÉUS

Dados anteriores:

1. pista: 1577 x 45m
2. Faixa de pista: 300m
3. Código de pista: 3C
4. Operação IFR

Dados atuais:

1. pista: 1577 x 45m
2. Faixa de pista: 150m
3. Código de pista: 3C
4. Operação VFR



POUSO CABECEIRA 29



PONTO MÉDIO DA PISTA



PONTO MÉDIO DA PISTA

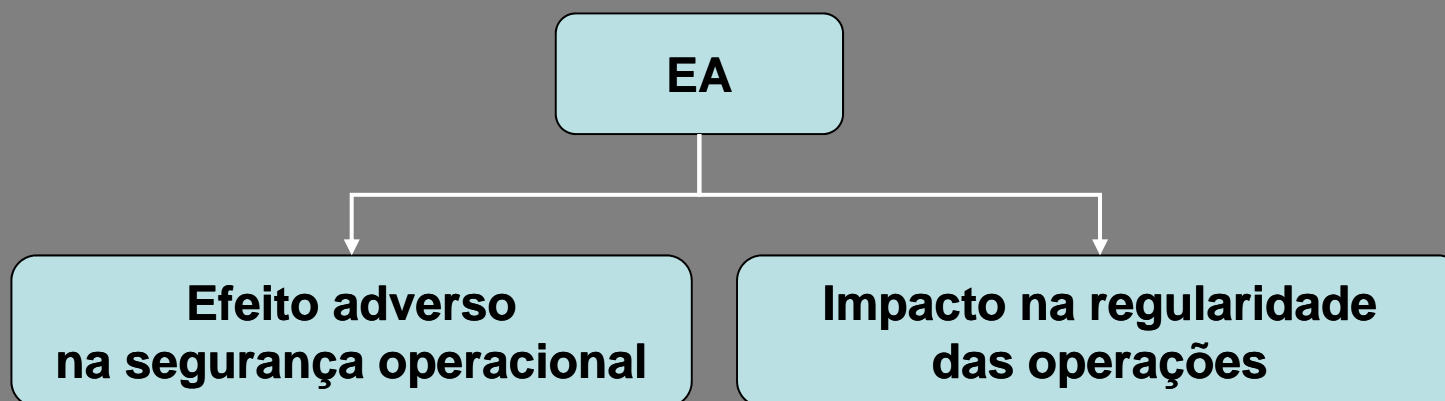


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Anexo 14 e as superfícies consideradas “violáveis”

4.2.4 Recommendation.— *New objects or extensions of existing objects should not be permitted above the conical surface or inner horizontal surface except when, in the opinion of the appropriate authority, the object would be shielded by an existing immovable object, or after **aeronautical study** it is determined that the object would not **adversely affect the safety** or **significantly affect the regularity of operations** of aeroplanes.*



Determinação do impacto na regularidade das operações aéreas (Baseado no Order FAA 7400.2G)

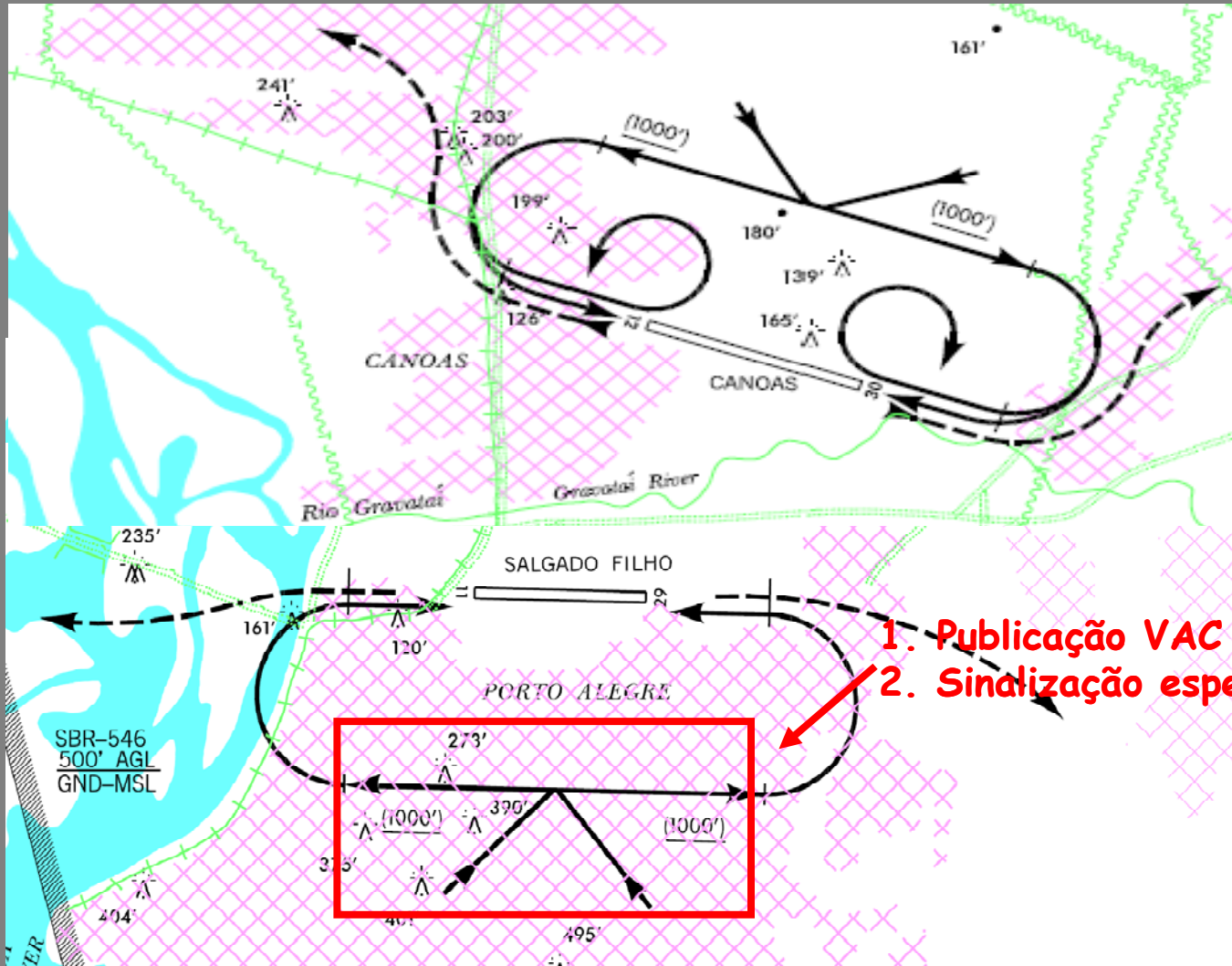
The type of activity must be considered in reaching a decision on the question of what volume of aeronautical activity is “significant.” For example, IF one or more aeronautical operations per day would be affected, this would indicate regular and continuing activity, thus a significant volume no matter what the type of operation. However, an affected instrument procedure or minimum altitude may need to be used only an average of once a week to be considered significant if the procedure is one which serves as the primary procedure under certain conditions.

Determinação do efeito adverso Baseado no Order FAA 7400.2G

- a. Require a change to an existing or planned IFR minimum flight altitude, a published or special instrument procedure, or an IFR departure procedure for a public-use airport.*
- b. Require a VFR operation, to change its regular flight course or altitude.*
- c. Restrict the clear view of runways, helipads, taxiways, or traffic patterns from the airport traffic control tower cab.*
- d. Derogate airport capacity/efficiency.*
- e. Affect future VFR and/or IFR operations as indicated by plans on file.*
- f. Affect the usable length of an existing or planned runway.*

Para cada um destes itens temos medidas mitigadoras associadas

Publicação e sinalização



1. Publicação VAC e AIP; e
2. Sinalização específica.

CONCLUSIONES

- a. Se impulse la realizacion del LAR - AGA.*
- b. Evaluar las acciones que se deben tomar, a partir de lo realizado por otros Estados, en lo que respecta a las medidas restrictivas o limitantes que se aplican cuando existan no conformidad con las normas*
- c. Evaluar la adopcion de procedimientos adoptados por otros paises (Ejem USA) para la elaboracion de Estudios Aeronauticos, y aplicarlos a la Region a efectos de encontrar normalizacion en los mismos.*