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# Unmanned Aircrafts System in China

**Department of Flight Standards  
CAAC**

**June 18, 2014**



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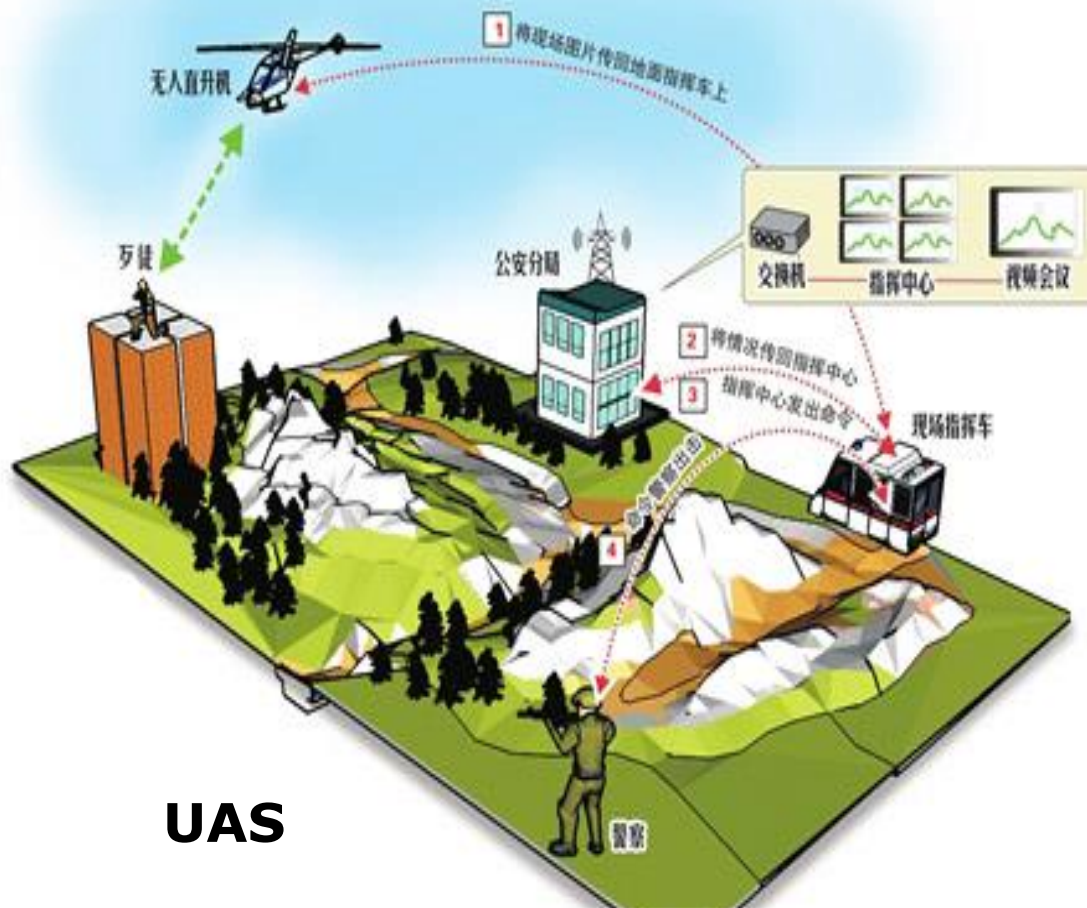
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# UAS

UA=RPA

UAS : Unmanned Aircraft System  
=RPAS : Remotely Piloted Aircraft Systems



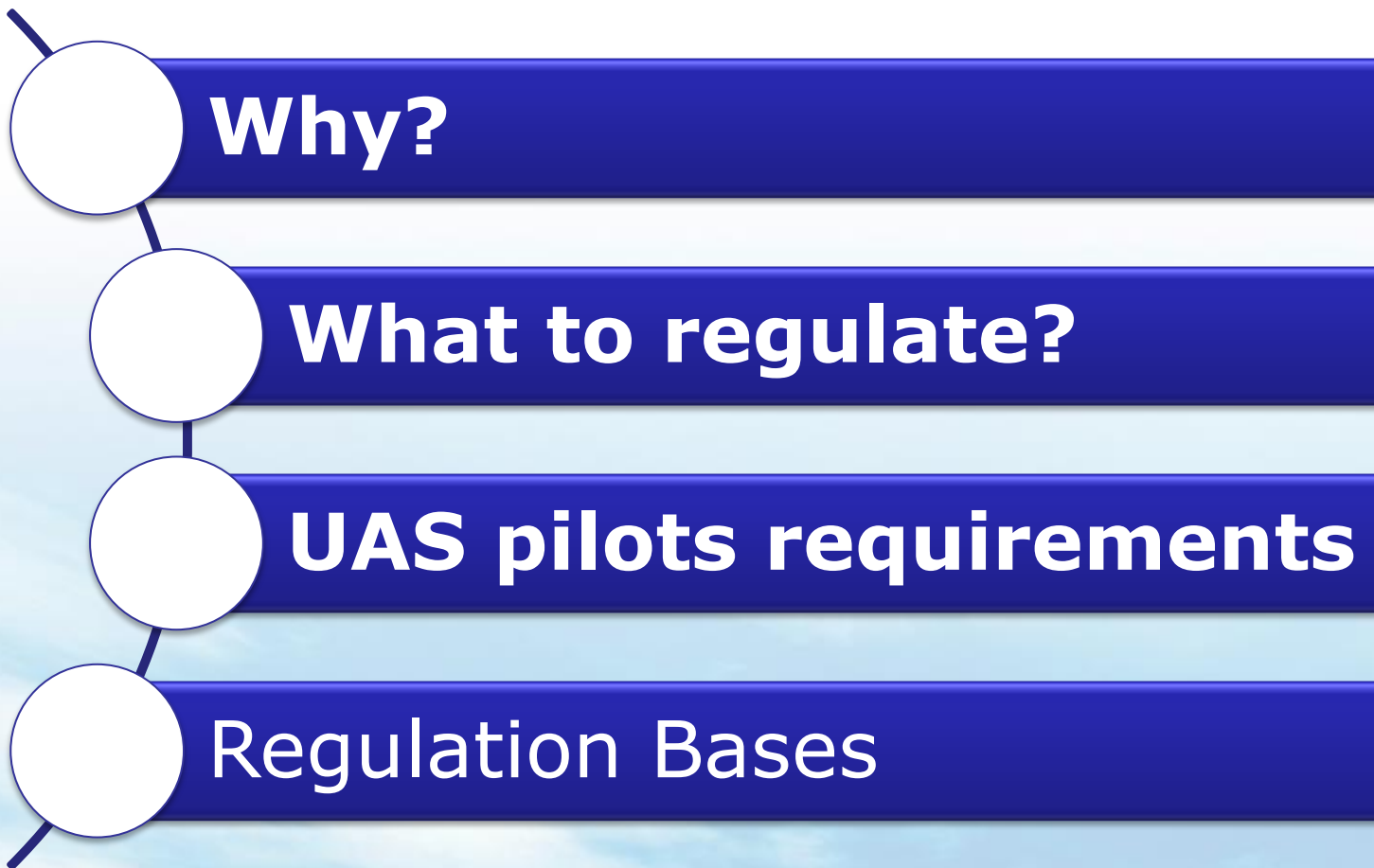
**It's a system!**

**CCAR-61  
AC-61-20**



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**Why?  
Should we regulate?**



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## Why?

It' s no longer a sport or a game!  
Bigger Aircrafts! Commercial operations!  
Public safety and security threats!  
Business with unlimited potential!



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**What to regulate?**





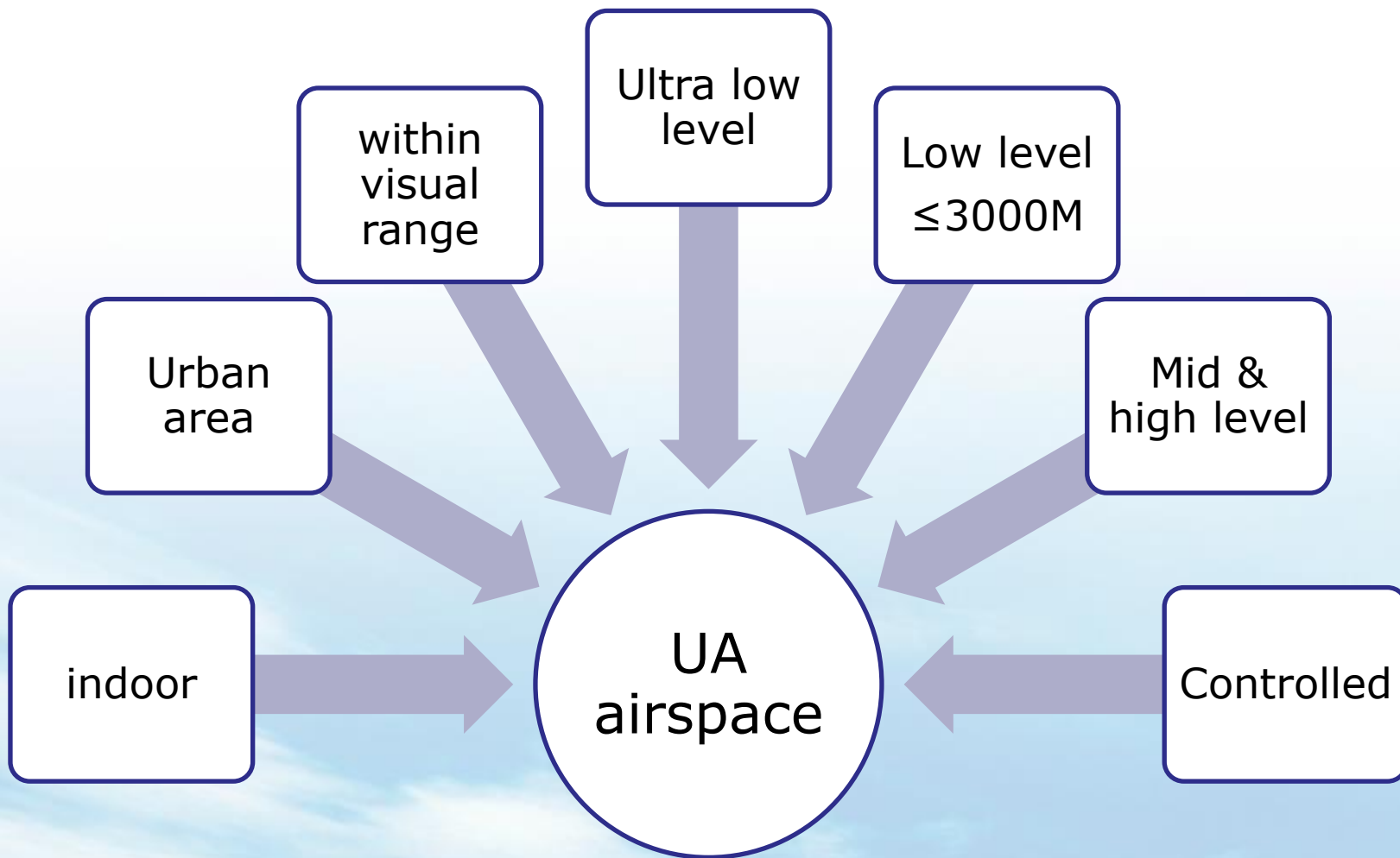
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## Categorization

Essential!

What kind of UA operations is subject to regulations!





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## Ops within visual range

CAAC defines:  
Radius is less than 500M  
Lower than 120M AGL.

CAAC does not regulate!



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## Designated UAS airspace

Airspace allocated by ATC (and air force) for UA to operate.



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## Overlapped (fusion) airspace

Airspace used simultaneously by both  
manned and unmanned aircrafts.  
(Not exercised presently in China)

## 民用航空器分类导图





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## Manned A/C categorized by

Operations characteristics

Public safety risks

Regulations parts

Well-established criteria



## UA categorized by

Level of automation

Public safety risks

Regulations not fully ready

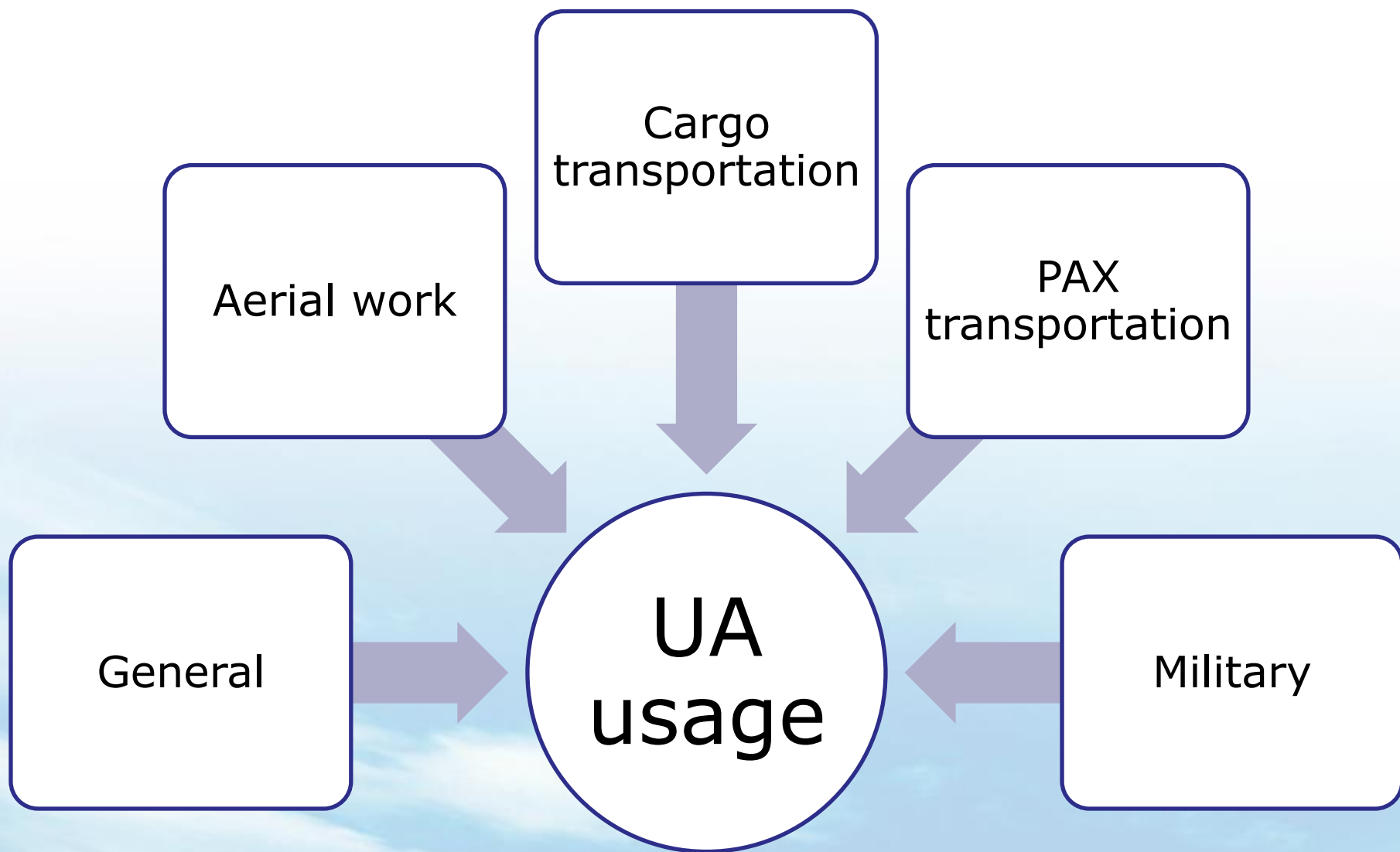
Different criteria between  
authorities





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Light  
7-116kg

Small  
116-  
5,700kg

Mini  
 $\leq 7\text{kg}$

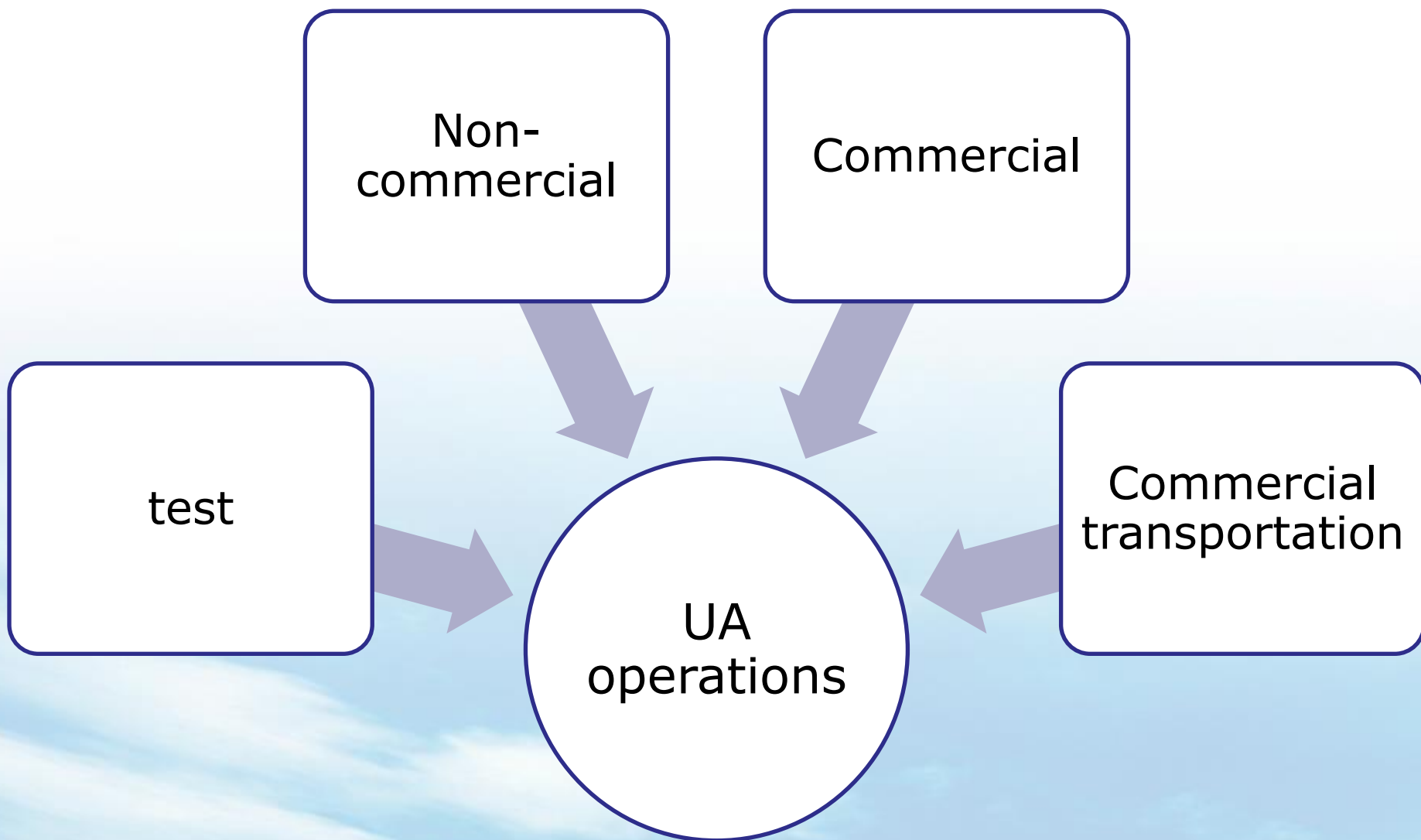
Big  
 $\geq 5,700\text{kg}$

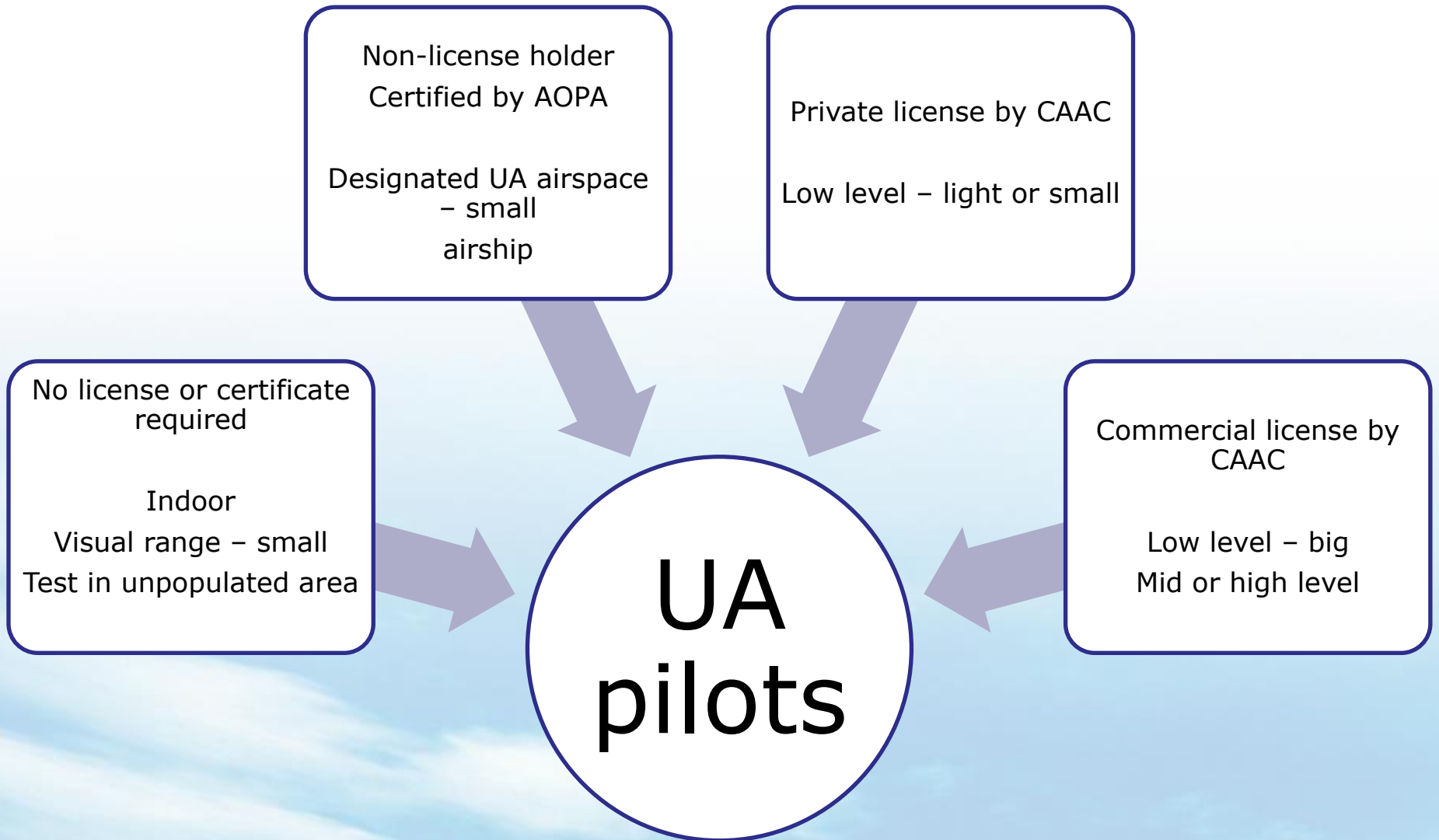
UA  
size



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# UA pilots requirements



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**Crew  
member**

**pilot**

**Captain**



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## Crew members

captains, pilots, task operators, observers.

Pilots should be the one communicate with ATC.



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## Pilots

The person who is responsible for controlling or monitoring the safe operations of UA.





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# Captains

The pilot who is responsible for controlling or monitoring the safe operations of the whole UAS.

If there is only one pilot in the UAS, he/she must be qualified as a captain.



## Requirements

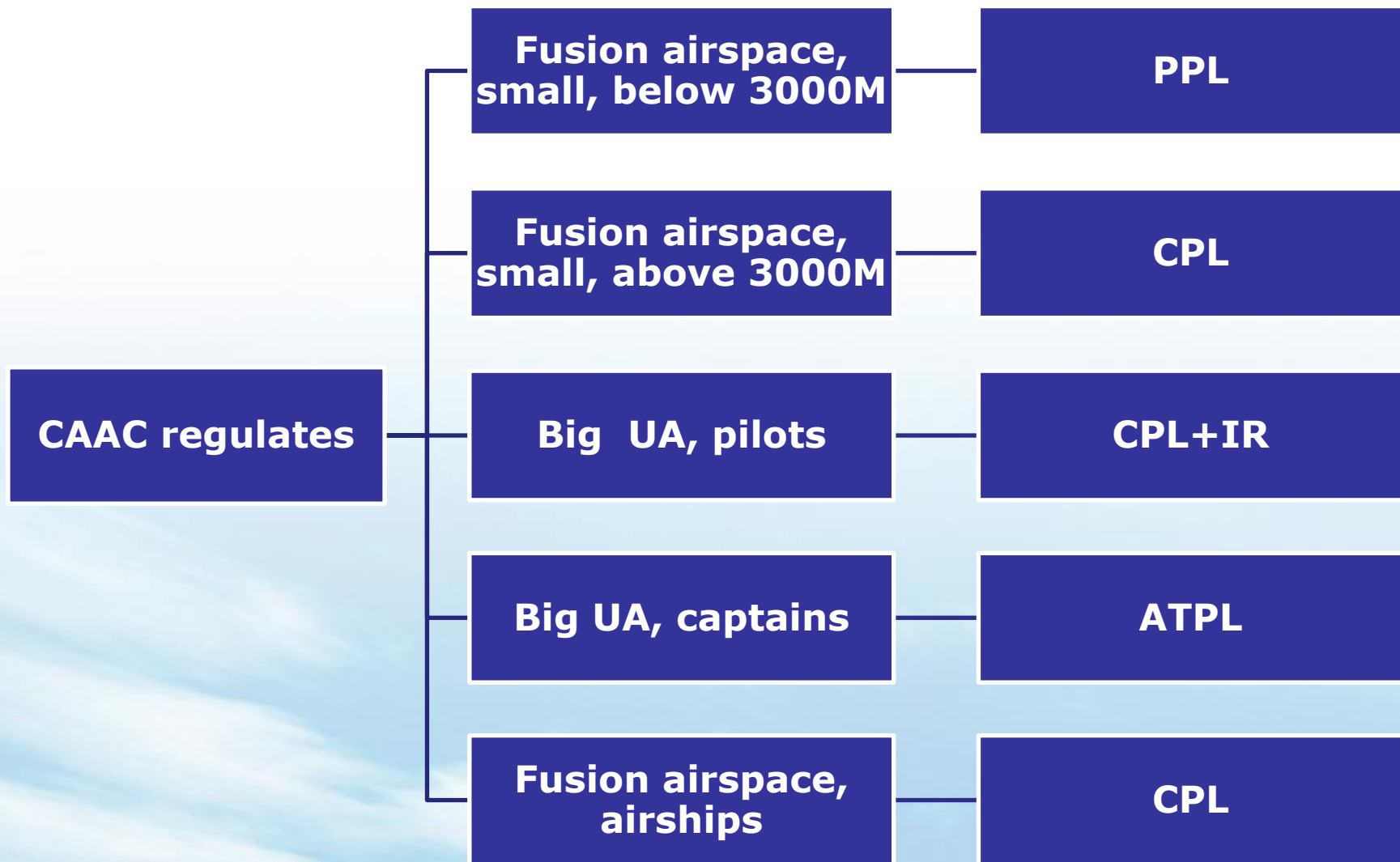
License or certificate

Theoretical knowledge

Skill training

Experience

Recency





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## Regulation base



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## ICAO

RPA SARP<sub>s</sub>, PANS  
Preparations for new technologies and  
mixed ops with manned aircrafts.



## ICAO

Pilots license in accordance with Annex 1.

Airworthiness certification of UAS in  
accordance with Annex 8.

Air operator certificates in accordance with  
Annex 6.



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# What could the future look like?

**ATC: “Give way to the unmanned 747  
taxiing from your left to right”**

**Pilot: “...”**



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<http://pilots.caac.gov.cn>

Thank you!