Roles and Responsibilities of Universities in Setting up a National NGAP Strategy

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I   Aviation in the R. O. Korea

- **ROK's aviation industry has developed into the world's 7th thanks to the continuous nurturing of aviation industry**

- **Around 0.9% of Korea GDP
  Around 80,000 decent job creation**

(만명)   International Passenger

	2012	2013	2014	2015	2016
Value	4,770	5,099	5,678	6,143	7,300
Growth	+11.9%	+6.9%	+11.4%	+8.2%	+18.8%

(만명)   Domestic Passenger

	2012	2013	2014	2015	2016
Value	2,160	2,235	2,465	2,798	3,091
Growth	+3.0%	+3.5%	+10.3%	+13.5%	+10.5%
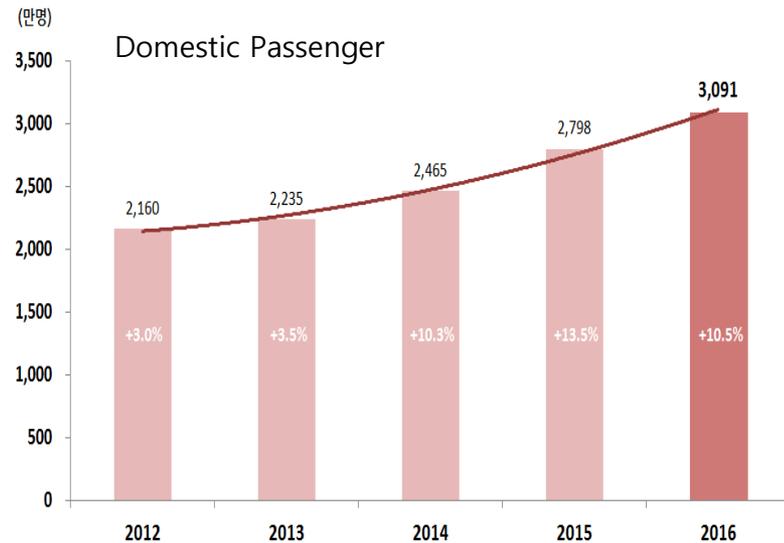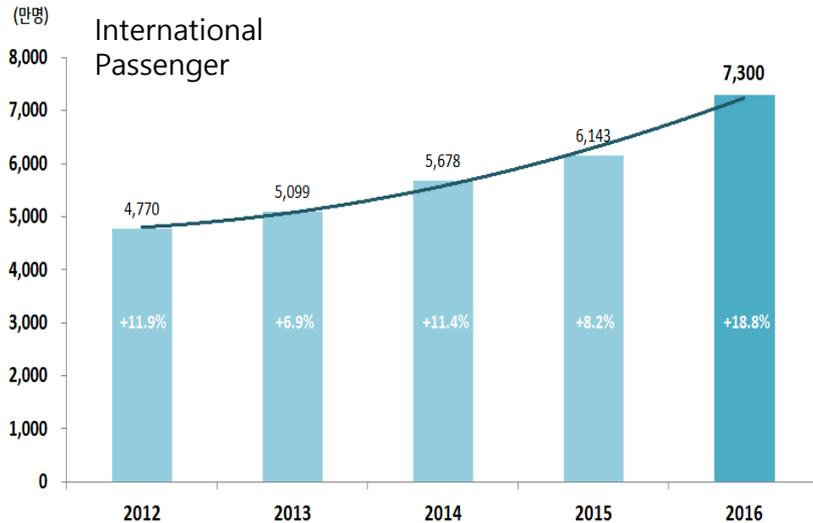
Airline/Airport

- **(Airline) Total 88 airlines in operation**

  (50 countries, 344 routes, 4,398 frequencies per week, as of 2017 Summer)

  9 national airlines in operation (44 countries, 231 routes, 2,795 frequencies)

- **(Airport) 15 airports across the nation**

  8 int'l airports (ICN, GMP, PUS, CJU, etc.), **7 domestic airports** (KWJ, USN, RSU, etc.)

International Status

(Unit: million)

Category	PAX + CGO		PAX		CGO	
	Rank	Amount (ton-km)	Rank	Amount (pax-km)	Rank	Amount (ton-km)
international	6	22,756	12	123,284	4	11,435
international + domestic	7	23,611	15	131,890	4	11,485

Airports in Korea

8 International

7 Domestic

4 Planning New

✓ **15 airports** are in service

| Group	Number	Airport
Hub	1	Incheon
Regional base	6	Jeju, Gimpo, Gimhae, Daegu, Cheongju, Muan
General	8	Yangyang, Wonju, Pohang, Ulsan, Gunsan, Gwangju, Yeosu, Sacheon

✓ **4 airports** are in planning

Airport	Cost (Billion $)	Object
Jeju 2nd	4.3	1 RWY(3,200m), Terminal(25Mpax), Access Road
Gimhae	5.3	3rd RWY(3,200m), Terminal(28Mpax), Access Road/Rail
Ulleung	0.51	1 RWY(1,200m), Terminal, Access Road
Heuksan	0.16	1 RWY(1,200m), Terminal, Access Road

3

Pilot Demand

Pilot Demand is Critical Due to

- Fleet Growth
- Pilot Retirement and Attrition

University of North Dakota,
2016 Pilot Supply Study
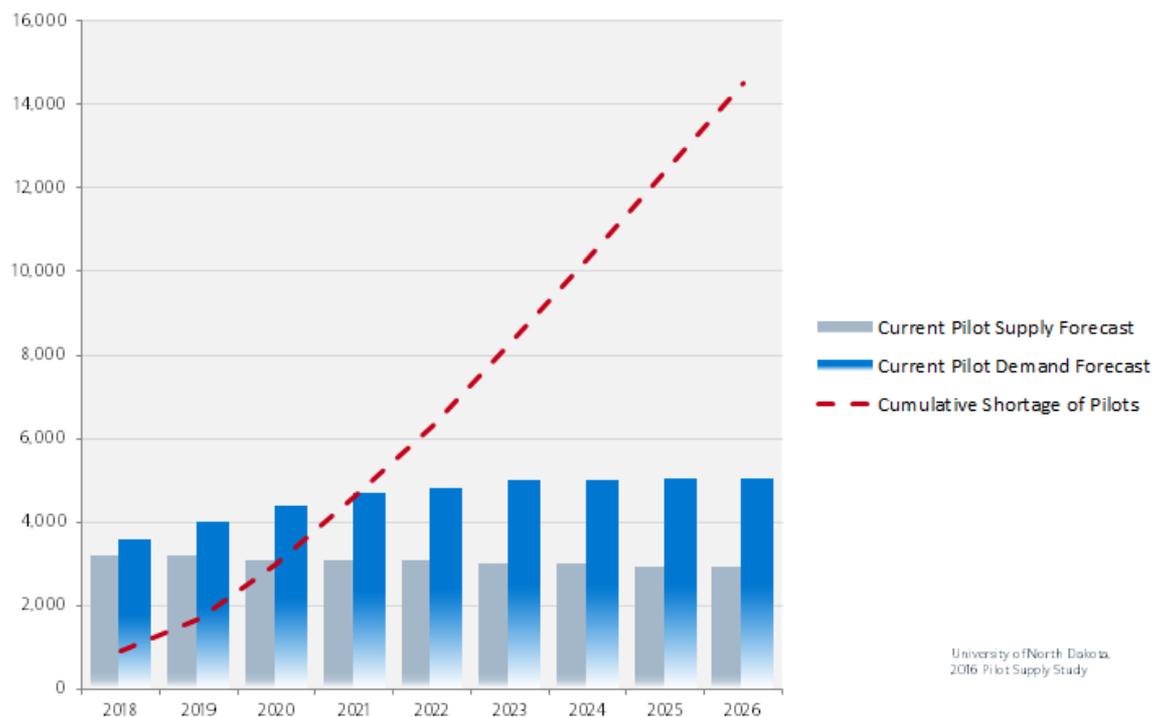
Pilot Shortage

Until 2036

- World Wide : 330,000
- Asia Pacific : 220,000

In Korea,

Every Year about 600 Pilot Shortage

However we have imbalance in Pilot Supply

Experienced Captain

Newly Licensed

Co-Pilot

Strategies

➢ Pilot demand should be precisely analyzed by Universities.

➢ Standard pilot training program should be developed

➢ Cooperation between Government, Industry and Academia should be enhanced

➢ Data-driven evaluation and maintenance of training program should be evolved.

➢ Change management concept can be incorporated into training program.

➢ Safety Management System should be part of training program

➢ Administrational and financial assistance can enhance training quality.

- ➤ Professional Pilot Program Model

- ➤ MOU between Airlines and Universities

- ➤ Hire first and Train later

- ➤ Pilot Aptitude Test

- ➤ Aviation Internship program

- ➤ Share Data and Information among Institutions

- ➤ Encourage Best Practices in pilot training

Conclusions

- ➤ Asia Pacific and Korea need more Pilots

- ➤ However training pilot takes time

- ➤ There are imbalance in experienced captain newly licensed pilot

- ➤ Cooperation should be enhanced among stake holders

- ➤ Universities can contribute in pilot training area with some ICAO new strategies

Thank you!