

**Unmanned aircraft system for
video monitoring of terrain with the aim
of environmental protection and
ecological control**

Research lines

Development of unmanned aircraft systems (UAS)

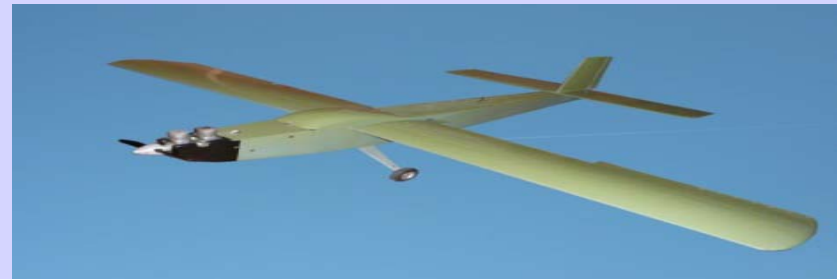
✦ Short-range UAS

$R=15-20\text{ km}$



✦ Medium-range UAS

$R=60-80\text{ km}$



✦ Long-range UAS

$R=120-160\text{ km}$



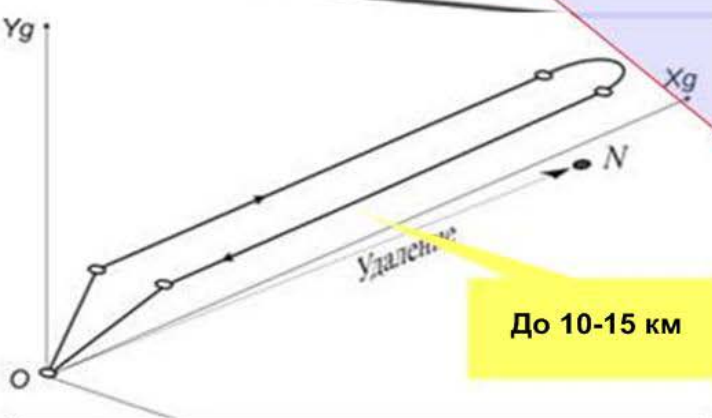
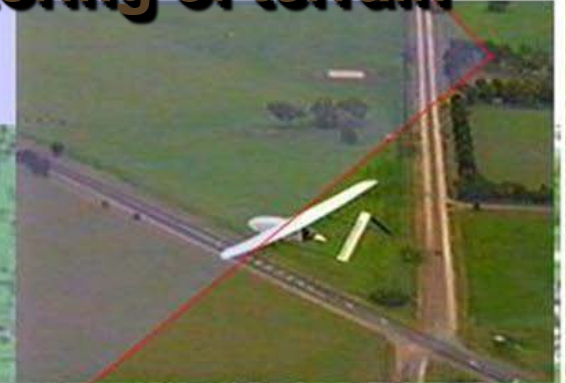
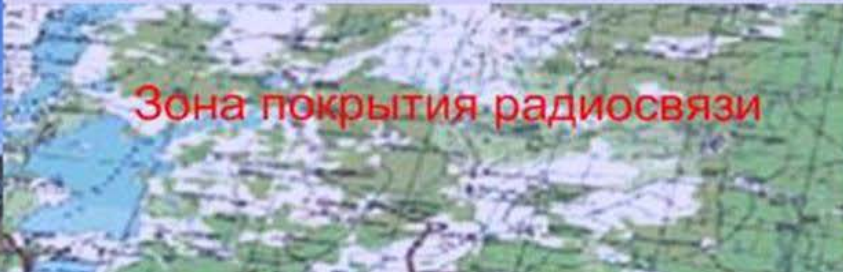
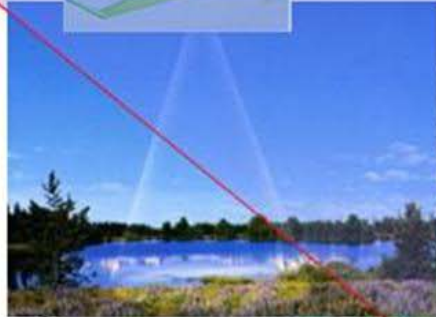
**Short-range unmanned aircraft system
for video monitoring of terrain**

S h o r t - r a n g e U A S

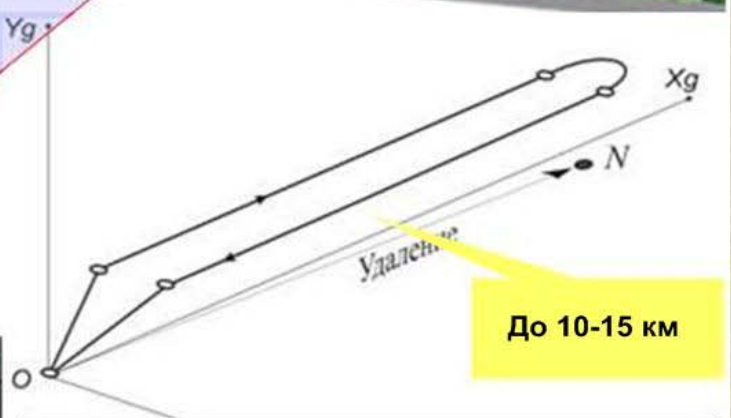


PTI of NAS of Belarus

Short-range UAS for real-time monitoring of terrain



Выход в зону мониторинга и ее облет



Выход в зону мониторинга и ее облет

Project description

Aim of project concept:

Development of UAS for ecological monitoring of:

- ✦ Industrial pollutant emissions
- ✦ Territories of national parks, woodlands and water areas for the purpose of protection of flora, fauna and environment
- ✦ Terrain and objects for the purpose of prevention and efficient detection of ecological catastrophes and fires
- ✦ Natural disaster regions, main traffic arteries and pipelines
- ✦ Law and order and frontiers.

Expected benefits:

- Increase of environment quality
- Preservation of unique flora and fauna
- Prevention of ecological catastrophes and their localization
- Banning of crossing of UC frontiers by illegal emigrants.

Description of project concept

1. SSI “PTI of NAS of Belarus” is responsible for:

1.1. Development and manufacturing of UAS containing:

- Hardware and software of control point
- UAV of required range
- Set of communication facilities
- Spare kit and UAV launching aids

1.2. UAV onboard integration of monitoring equipment

1.3. Series manufacturing and warranty maintenance.

2. Cooperating co-executor is responsible for:

2.1. Delivery of set of airborne sensors for surveillance of industrial pollutant emissions in airspace

2.2. Delivery of airborne TV systems of video monitoring

2.3. Delivery of airborne IR systems of video monitoring.