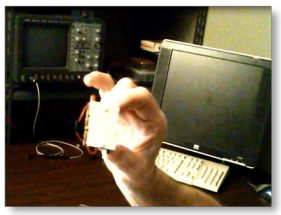
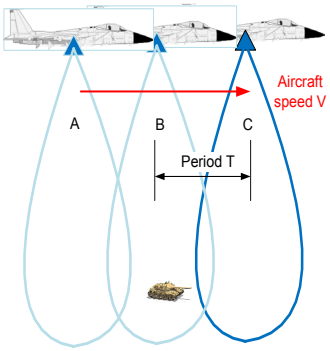
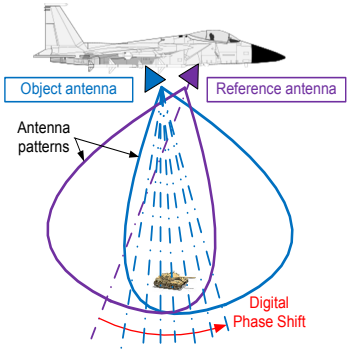
PLANAR MONOLITHICS INDUSTRIES, INC.
PMI East Coast: 7311-F Grove Road, Frederick, MD 21704 USA
Tel: 301-662-5019 Fax: 301-662-1731
PMI West Coast: 4921 Robert J. Mathews Parkway, Suite 1, El Dorado Hills, CA 95762 USA
Tel: 916-542-1401 Fax: 916-265-2597
Web: www.pmi-rf.com Email: sales@pmi-rf.com

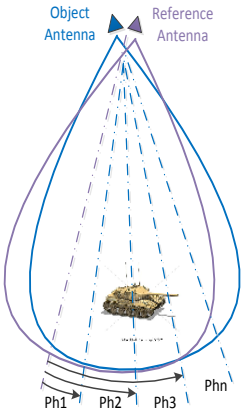
RF/MICROWAVE IMAGING RADAR

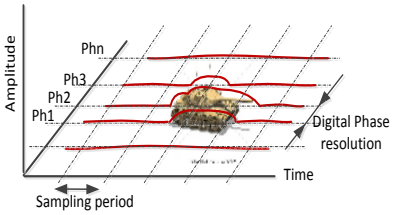


Technical Description:









- Proposed new concept of RF/ microwave imaging system will provide **all weather high-resolution imaging** with good **penetrating** of a foliage and even ground capability;
- Image **resolution** determined by processor and sampling frequency and do **not limited by diffraction**;
- **Non-scanning** monopulse system allows dramatically **increase imaging range** by integration 2-3 orders more signals than regular scanning systems;
- Proposed imaging system can **simultaneously** cover entire sky, 360º by azimuth and elevation for **multiple targeting**;
- Directional antennas can be close positioned or distributed in **small size** aperture and installed on small aircraft or **UAS.**

REFERENCES

[1] A. Gorwara, P. Molchanov, O. Asmolova, Doppler micro sense and avoid radar, 9647-6, Security+Defense 2015, Toulouse, France, September 2015, (http://pmi-rf.com/documents/DopplerMicroSenseandAvoidRadarPaper.pdf).

[2] P. Molchanov "All digital radar architecture." Paper 9248-11, Security+Defense Conference, Amsterdam, September 25, 2014, (http://spie.org/Publications/Proceedings/Paper/10.1117/12.2060249).

[3] P. Molchanov, O. Asmolova. "Sense and avoid radar for micro-nano robots (Invited Paper)," Security+Defense Conference, Amsterdam, September 24, 2014, (http://spie.org/Publications/Proceedings/Paper/10.1117/12.2071366).