

## Secondment Report Form

|                          |   |
|--------------------------|---|
| <b>Seconded</b>          | Bartłomiej Mizak  |
| <b>Host Organization</b> | Id: RUAG Space AB                                       |
|                          | Name: RUAG Space AB, Göteborg, Sweden                   |
| <b>Research Topic(s)</b> | Space application antennas (communication & navigation) |
|                          |   |
|                          |   |

### ACTIVITIES DURING THE SECONDMENT

During my stay in RUAG Space AB I was designing microstrip space application patch antennas destined for European Student Earth Orbiter and European Student Moon Orbiter (European Space Agency projects). In my work I focused on influence of antenna geometrical dimensions and shape on its parameters (especially wideband). My main activity was to methodically and systematically check new ideas in CST Microwave Studio and simulate in search of better solutions to achieve given requirements.

I regularly consulted my work with employees of Antenna and Microwave Department in RUAG Space AB. My direct supervisor was chief engineer of electromagnetics Joakim Johansson and I was obligated to present results of my work every week in front of electromagnetics and antennas experts. Thanks to those meetings my knowledge about problems that I have to face and foresee in designing antenna for space application was greatly broaden.

During my stay I was also presented with different ideas from what I did and that helped me to take new approach in my design so now I can design even better antenna at less effort and better manage my time which as a result will shorten the way to achieve my goal. Experts from RUAG Space pointed out main issues that should be particularly taken under consideration during antenna design process.

### MAIN RESULTS OF THE STAY

< List of the publications co-written (or in progress)>

Number of Publications: 0 \_\_\_\_\_

Number of Documents/ Reports: 0 \_\_\_\_\_

Number of Case Studies & Demonstrators: 0 \_\_\_\_\_

Other(s):

(1) (in progress) Bachelor's Thesis:  
"Bipolar, thin-profile, S-band, space  
application antenna."

(2) \_\_\_\_\_

(3) \_\_\_\_\_

\* Attach all relevant documentation that specifies your results

### FORECAST ACTIVITIES

My work manner, following the secondment project, will not be changed in comparison to what I did before this secondment. I will only apply and add to my work what I have learnt during my stay at RUAG Space. This includes new ideas and some new approaches to solving problems I have met.

In order to improve CARE's secondment program, please fill this short questionnaire. Use the space at the end to expand your answers, if needed. Our aim is to improve the general experience for secondees in future.

Disagree < > Agree

#### GENERAL

|  |                            |                            |                            |                                       |
|--|----------------------------|----------------------------|----------------------------|---------------------------------------|
| My objectives were achieved.                             | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input checked="" type="checkbox"/> |
| The research topics were relevant to my work.            | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input checked="" type="checkbox"/> |
| I benefited from being part of a wider research culture. | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input checked="" type="checkbox"/> |

#### HOST ORGANIZATION

|   |                            |                            |                            |                                       |
|---|----------------------------|----------------------------|----------------------------|---------------------------------------|
| I am satisfied with the quality and quantity of supervision I received. | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input checked="" type="checkbox"/> |
| I had access to adequate resources to support my research..             | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input checked="" type="checkbox"/> |

#### SECONDMENT PROGRAM

|  |                            |                            |                            |                                       |
|--|----------------------------|----------------------------|----------------------------|---------------------------------------|
| I would recommend this secondment programme to others.                       | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input checked="" type="checkbox"/> |
| I believe the skills I have learned will help me to improve my job/research. | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input checked="" type="checkbox"/> |
| I would apply to another programme similar to CARE.                          | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input checked="" type="checkbox"/> |
| In general, how would you classify the CARE Secondment Programme?            | 1 <input type="checkbox"/> | 2 <input type="checkbox"/> | 3 <input type="checkbox"/> | 4 <input checked="" type="checkbox"/> |

Other questions/comments to be potentially considered: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### SIGNATURES

Candidate

Date: 2011/10/22  
(year/month/day)

Signature

Bartłomiej Mirkel