ESOcast Episode49 : On Air: A Day in the Life of ESO		
00:00 **[Visuals start]** **[Narrator]** On the day of its 50th anniversary, the 5th of October 2012, ESO, the European Southern Observatory produced a live webcast called "A Day in the Life of ESO". This webcast gave viewers a unique opportunity to see inside the world's most productive ground-based astronomical observatory, and to help celebrate ESO's first 50 years of exploring the southern sky. Founded in 1962, ESO has evolved into today's pre-eminent intergovernmental science and technology organisation in astronomy operating three unique world class observing facilities in Chile and its headquarters located in Garching, Germany.		**Images:** ESO HQ outdoor Various shots from webcast "Live" button
00:00 **ESOcast intro** This is the ESOcast! Cutting-edge science and life behind the scenes of ESO, the European Southern Observatory.		ESOcast introduction

00:00 **[Narrator]** It is the morning of the 5th of October, the countdown for the webcast "A Day in the Life of ESO" has begun, and preparations are in full swing. Before long, the live stream, hosted by Dr J, aka Dr Joe Liske, will begin, giving members of the public the opportunity to interact with ESO astronomers and engineers by listening to live talks and asking questions.		ESO HQ Webcast preparations
00:00 **[Narrator]** Meanwhile, on the other side of the Earth, Brigitte Bailleul from France, the lucky winner of the "Tweet your way to the VLT!" competition has arrived at Paranal Observatory in Chile and is preparing to claim her prize: a chance to make a live observation using the world's most advanced visible-light astronomical observatory, the Very Large Telescope, or VLT. Before long, the first live link from ESO's headquarters in Garching, Germany to Brigitte in Paranal is made and hundreds of people from around the world watch as Brigitte begins making the observations. **[Link to Paranal - Astronomer]** So she is now a full expert, and she is going to start the observations. Ok, so now we have sent the command to start the observations. **[Narrator]** The target for the VLT is the Thor's Helmet Nebula — an object chosen by public vote as part of the "Choose What the VLT Observes" competition. **[Link to Paranal - Astronomer]**		Brigitte at Paranal Making observations in control room First part of zoom – stop before VLT observations

Wow, that's really incredible! This is 30 seconds exposure time on the VLT – that's what you get. This is really incredible. So what do you think? **[Link to Paranal - Brigitte]** It's great!		
00:00 **[Narrator]** Back in Germany Dr J. hosts a series of talks from ESO experts who provide first-hand information and insights into the world of astronomical research. **[Soundbite]** It's all about questions, we ask questions because we want to know, that's what we do, that's what we live for. **[Soundbite]** And in particular, what was discovered here was the emission of a simple sugar, and this is important because sugar is the basic chain that produces energy for life. And this simple sugar was detected for the first time with ALMA. **[Soundbite]** It's true of hi-tech that you have an augmented vision of nature. This is where the scientist goes very close to nature, that's the way he can perceive nature. **[Narrator]** Before, during and after each talk, hundreds of viewers submit questions to the speakers via Facebook, Twitter, e-mail, or the chat box on the live stream itself. **[Soundbite - Dr J]**		Dr J with DG Good sound bytes from some of the speeches Some of the questions and answers (short soundbytes). Effect transition in between each.

What time of day can you use the ALMA radio telescopes, only at night? **[Soundbite – answer]** No, you can use ALMA in principle 24 hours a day. **[Soundbite - Dr J]** So do you have any advice for those young people out there watching who want to be astronomers? **[Soundbite – answer]** Yes! My advice is questions – ask questions, all the time. **[Soundbite - Dr J]** After finding biological activity signs in an exoplanet's atmosphere, what do you think will be the next step? What will we do next? **[Soundbite – answer]** I think one of the next steps is perhaps to search for radio signals. **[Narrator]** Furthermore, almost 600 viewers from 55 different countries put their ESO knowledge to the test in a quiz that ran throughout the entire day.		
00:00 **[Narrator]** Between the individual presentations, chapters of ESO's anniversary movie "Europe to the Stars" are shown. This documentary showcases ESO's story with breathtaking visuals.		Some nice clips from our movie

00:00 **[Narrator]** Finally, at the end of the day a live link to the Paranal observatory is established once again. Standing on the platform of the VLT observatory at the 2600-metre summit of Cerro Paranal, a group of astronomers wait with an anxious Brigitte to witness the results of the observations made earlier. Nobody is disappointed. The VLT has captured a beautiful and spectacular image of the Thor's Helmet Nebula. (Music 15 sec)		Paranal platform with astronomers Thor's Helmet pan
00:00 **[Narrator]** And with that, it is time for Dr J. to sign off, marking the end of the live webcast: "A Day in the Life of ESO". For Brigitte it was a remarkable "once in a lifetime" opportunity, and for the viewers, a chance to share her unique experience. What better way to celebrate 50 fantastic years of astronomy at ESO?		Dr J Brigitte at Paranal? Flags?
00:00 **[Outro]**		ESOcast is produced by ESO, the European Southern Observatory. *ESO, the European Southern Observatory, is the pre-eminent intergovernmental science and technology organisation in astronomy designing, constructing and operating the world's most advanced ground-based telescopes.*

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